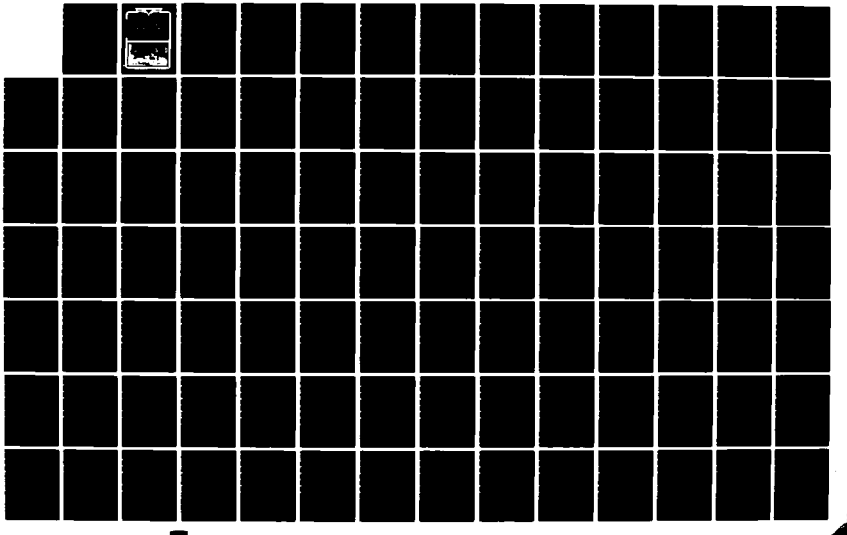
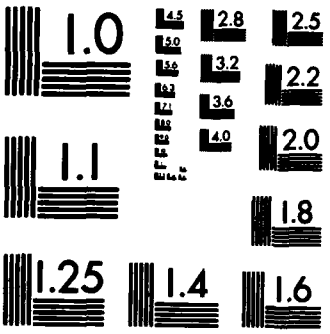
AD-A157 442 DEPARTMENT OF CLINICAL INVESTIGATION ANNUAL RESEARCH PROGRESS REPORT FISCAL YEAR 1984 VOLUME 1(U) BROOKE ARMY MEDICAL CENTER FORT SAM HOUSTON TX J H ANDERSON 1/4

UNCLASSIFIED 01 OCT 84 F/G 6/5 NL





DEPARTMENT OF CLINICAL INVESTIGATION

ANNUAL RESEARCH PROGRESS REPORT

FISCAL YEAR 1984
VOLUME I

BROOKE ARMY MEDICAL CENTER FORT SAM HOUSTON, TEXAS 78234

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE

READ INSTRUCTIONS BEFORE COMPLETING FORM

1. REPORT NUMBER: RCS MED-300 (R1)	2. GOVT ACCESSION NO. A157442
3. RECIPIENT'S CATALOG NUMBER	
4. TITLE (and Subtitle): ANNUAL RESEARCH PROGRESS REPORT Volume 1	5. TYPE OF REPORT & PERIOD COVERED: ANNUAL - FY 84
	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s): JAMES H. ANDERSON, JR., M.D. Lieutenant Colonel, MC	8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS: Department of Clinical Investigation Brooke Army Medical Center Fort Sam Houston, Texas 78234-6200	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS: Commander Brooke Army Medical Center Fort Sam Houston, Texas 78234-6200	12. REPORT DATE: 1 October 1984 13. NUMBER OF PAGES: 460
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office): Office of The Surgeon General Department of the Army Washtinton, D.C. 20314	15. SECURITY CLASS. (of this report): Unclassified 15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT (of this Report)

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)

n/a

18. SUPPLEMENTARY NOTES

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Clinical Investigations, all medical specialties
Publications, presentations
Detail Summary Sheets (Study Objective; Technical Approach; Progress; Status)

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Subject report identifies the research activities conducted by Brooke Army Medical Center investigators through protocols approved by the Clinical Investigation Committee, the Institutional Review Board, and the Animal Care Committee and registered with the Department of Clinical Investigation during FY 1984. Report also includes known presentations and publications by the Brooke Army Medical Center staff. The research protocols described were

(continued on reverse side)

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Block 20. Abstract

conducted under the provisions of AR 40-38, Clinical Investigation Program; AR 40-7, Use of Investigational Drugs in Humans; USAMRDC 70-25, Use of Volunteers as Subjects of Research; HSC Reg 40-23, Management of Clinical Investigation Protocols and Reports; and BAMC Memo 40-98, Department of Clinical Investigation, to insure the medical well-being, preservation of rights and dignity of human subjects who participated in these investigational studies. Research studies involving the use of laboratory animals were conducted under the provisions of AR 70-18, Laboratory Animals, Procurement, Transportation, Use, Care, and Public Affairs.

Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A1	

FOREWORD
(An Editorial Opinion)

"The time has come," the Walrus said,
"To talk of many things:
Of shoes - and ships - and sealing wax -
Of cabbages and kings
And why the sea is boiling hot -
And whether pigs have wings."[1]

Though the Walrus was more concerned with dining on naive oysters, Clinical Investigation has to ask questions of a much more critical nature, the answers to which will determine the success or failure of the program. Traditionally, the good and the bad have been examined in this forum. This year the fate of Clinical Investigation appears to be much like that of the young oysters who, in reply to the walrus's invitation to begin dining, said,

"But not on us!" the Oysters cried,
Turning a little blue.
"After such kindness, that would be
A dismal thing to do!"[2]

On the dismal side:

The renovation of the Brooke Army Medical Center Department of Clinical Investigation Laboratory Animal Facility (which according to the President of American Association for Accreditation of Laboratory Animal Care (AAALAC) would have resulted in continued accreditation) was cancelled by the Fort Sam Houston Directorate of Facilities Engineers. In February 1985, we will be required to respond to the AAALAC notice of Probationary Accreditation that no work has been accomplished on the facility. This will result in BAMC losing accreditation. Unfortunately for this project, but obviously, expenditures for patient care must take precedence over animal laboratories. In addition, our boarded laboratory animal care specialist (91T) was transferred to a veterinary clinic in Korea.

Four of our nine enlisted laboratory technicians were transfered without replacement. Clinical Investigation MEDCASE funding for 1985 is forecasted at less than half of 1984.

Protocols involving critical health care issues have been suspended and held in limbo at HSC for over a year.

---

[1]Carroll, Louis. Through the Looking Glass, 1871

[2]Ibid

The medical illustrator authorization has been taken over by BAMC Plans, Operation and Training, hopefully to prevent its complete loss to a contracted function of the post.

The proposed new BAMC has failed to recognize adequate space for the animal facilities and, in fact, the Department of Clinical Investigation may not even be included in the new building.

On the bright side:

The key to good management is perhaps the philosophy of "When life hands you lemons - make lemonade." The work reflected in this report is evidence of BAMC's dedication to that philosophy. Using figures published in the 1983 annual reports, BAMC ranked sixth of the eight MEDCENs in receipt of MEDCASE funds from HCSCIA calculated either per resident and fellow or per physicians assigned. BAMC also ranked sixth in total operating monies for 1983. Despite this, BAMC had the most publications, the highest publication per physician ratio and the lowest cost per publication of any of the eight MEDCENs.[3]

The BAMC Clinical Research Center opened its doors with three beds, a full-time nurse and technicians. This inpatient facility, culmination of a four year dream, is open to all clinical services for conduct of any approved protocol.

Again this year, the real credit for the work presented in this volume belongs to the clinical investigators (from principal investigators to laboratory technicians) who have devoted their time and talents to increasing medical knowledge and quality of care. Equally important are the patient volunteers who freely consented, sometimes without direct benefit to themselves, to participate in gathering new knowledge and providing a base for improved patient care. All are to be commended for their roles.

On the future side:

One is still left with the questions and the fate of Clinical Investigation. What are the priorities of military medicine and what should they be? Clearly we are in times of increased emphasis on readiness, demands for increased patient care with decreased resources, and increased pressure for significant personnel and budget cuts. A primary function of Clinical Investigation is support of residency and fellowship training programs. If these training programs are under attack then so is Clinical Investigation. Clinical Investigation provides the support for most of the medical use of animals in the MEDCENs; therefore, if the military is not going to support the use of animals in medical research and training, what need is there for Clinical Investigation laboratory animal facilities? In times of budget cuts

---

[3]Figures calculated from 1983 annual reports and available from this office.

and decreased spending, several good clinical studies were not done because of the inability to utilize private industry reimbursement for clinical investigations. Is Clinical Investigation important?

It is time to seriously study the question - Should Clinical Investigation be abandoned in the Army? LTG Mittemeyer, the Surgeon General, said hospital staff members should do more clinical investigations.[4] If Clinical Investigation is to survive, then DA and HSC are going to have to support the program by recognition of it's value, number and stability of personnel, and money. These decisions must be made and made soon.

This is the last foreword (and editorial opinion) I will have the pleasure of writing. The questions I have offered should have obvious answers. These answers require the best abilities of the entire AMEDD. I leave with some sadness, for I will truly miss BAMC and Clinical Investigation. Clinical Investigation has matured well at BAMC. Over the last four years, the Department has added an animal laboratory facility, a medical illustration service, an inpatient and outpatient clinical research center, and a clinical research protocol coordinator. It is my sincere hope that BAMC, with the support of HSC and DA, will continue to build an active, productive resource for clinical investigation studies, new knowledge and increased patient health.

In closing I would like to quote Louis Pasteur who on the occasion of his 70th birthday said he was,

> "a man whose invincible belief is that Science and Peace will triumph over Ignorance and War, that nations will unite, not to destroy, but to build, and that the future will belong to those who will have done most for suffering humanity."[5]

JAMES H. ANDERSON, JR., M.D.
LTC, MC
Chief, Department of Clinical Investigation

---

[4]Mittemeyer, LTG B.T. Speech, November 1981

[5]Pasteur, Louis. Speech, Sorbonne, Paris, France, 1892.

ACKNOWLEDGEMENT

There are many individuals who play major roles in assuring that clinical investigation studies are possible and are of the highest quality. Too often we fail to adequately thank them.

I would like to express my appreciation to Brigadier General Robert H. Buker and the Command group, and to the review committee members who devoted long hours and careful thought to the protocol review processes during Fiscal Year 1984.

CLINICAL INVESTIGATION COMMITTEE

COL James B. Peake
LTC C. Kenneth McAllister
LTC Edward J. Shumski
LTC Roger L. Wallace
MAJ Glenn M. Mills
MAJ Martha E. Schoolcraft
COL Fred Goldner
LTC Terry E. Pick
LTC Roby P. Joyce
LTC Arthur L. Badgett
MAJ Bruce A. Gunn
MAJ David G. Burleson

INSTITUTIONAL REVIEW BOARD

COL Robert L. Treasure
COL Irving C. Njus
LTC Gabriel Durand-Hollis
MAJ James J. Jennings, Jr.
MAJ Stanley M. Piotrowski
Dr. William A. Boyson
SSG Isaac J. Williams
Ms. Betsey Cunningham
COL Melvin L. Butler
LTC Justus P. Selph
LTC David D. Steen
MAJ John B. Swihart
CPT Frederic A. Lombardo
Dr. Arthur D. Mason
MSG Jimmy L. Hudson
Ms. Carmen Lopez

ANIMAL CARE COMMITTEE

MAJ Clayton L. Hadick
LTC Richard E. Whitmire
MAJ James J. Jennings, Jr.
CPT Debra J. Krikorian
Ms. Robbie Fuqua
LTC Gene B. Hubbard
MAJ Donald J. Jansen
MAJ John B. Swihart
CPT Richard L. Daise

A special thanks is also given to the support staff in Clinical Investigation - Mrs. Dodie Bratten, Mrs. Helen Smith, Mr. Roberto Rios, and SFC Charles M. Loyd.

JAMES H. ANDERSON, JR., M.D.
Lieutenant Colonel, MC
Chief, Department of Clinical Investigation

UNIT SUMMARY - FISCAL YEAR 1984

A. Objectives

The objectives of the Department of Clinical Investigation are as follows:

1) To achieve continuous improvement in the quality of patient care.

2) To assist in the professional growth and development of the house staff by providing guidance and support in clinical research.

3) To provide a milieu conducive to retention of competent staff personnel and recruitment of new personnel.

4) To provide a review body for research proposals by investigators currently assigned to MEDDAC Units in an effort to promote an interest in Army medicine and retention in the Army Medical Corps.

5) To maintain an atmosphere of inquiry consistent with the dynamic nature of the health sciences.

6) To maintain a high professional standard and accreditation of advanced health programs.

7) To assure the highest level of professional standards in the conduct of human research and animal research.

B. Technical Approach

All research, investigational and training activities within the Department of Clinical Investigation are conducted under the guidance of AR 40-7, AR 40-38, AR 70-25, AR 70-18, and HSC Reg 40-23. Careful monitoring of all approved protocols is conducted in order to assure strict compliance with the applicable regulations.

C. Staffing

Name	Rank	MOS	Title
Anderson, James H., Jr.	LTC	61C00	Chief, Endocrinologist
Pedersen, Carl E., Jr.**	LTC	68A9A	Laboratory Director/Virologist
Gunn, Bruce A.	MAJ	68A00	Microbiologist
Krikorian, Debra J.	CPT	68C00	Biochemist
Hadick, Clayton L.	CPT	64A00	Veterinary Lab Animal Officer
Loyd, Charles M.	SFC	92B3R	NCOIC
Diaz, Noel	SSG	92B2R	Med Lab Specialist
Bretthauer, Ricky W.	SSG	92B2R	Med Lab Specialist
Gregory, William T.**	SP5	91T20	Animal Care Specialist
Knight, Steven D.**	SP5	92B2	Med Lab Specialist
Tchernowitz, Clark	SP5	92B2	Med Lab Specialist
Blomgren, Wendy E.	SP5	91T20	Animal Care Specialist
Jones, Sheila*	SP5	92B2	Med Lab Specialist

* Assigned 21 Sep 84
** Reassigned 17 Dec 83; 17 Sep 84; 17 Jun 84

C. Staffing (continued)

Name	Rank	MOS	Title
Mead, Michael***	SP4	92B1	Med Lab Specialist
Murphy, Cynthia**	SP4	92B1	Med Lab Specialist
Murphy, Thomas	SP4	92B1	Med Lab Specialist
Davis, Geri M.	SP4	92B1	Med Lab Specialist
Parker, Timothy A.*	SP4	91T20	Animal Care Specialist
Hicks, Jeninne M.*	SP4	92B1	Med Lab Specialist
Merrill, Gerald A.	GS11	00401	Research Immunologist
Vaughn, George K.	GS11	00345	Medical Technologist (Micro)
Ayala, Eleanor	GS9	00644	Medical Technologist
Posch, John	GS9	00644	Medical Technologist
Reeb, Barbara	GS9	00644	Medical Technologist
Peek, Michael W.	GS9	01320	Chemist
Marshall, Regina*	GS9	00610	Clinical Nurse
Chapa, Isidoro	GS7	00645	Medical Technician
Wolcott, Karen M.	GS7	00404	Biological Technician
Rios, Roberto	GS9	01020	Medical Scientific Illustrator
Bratten, Dodie	GS9	00301	Clin Research Protocol Coord
Smith, Helen J.	GS6	01087	Editorial Assistant

* Assigned 1 Aug 84; 21 Sep 84; 27 Aug 84
** Reassigned 15 May 84
***REFRAD 18 Jul 84

D. Funding

Type	Fiscal Year 83	Fiscal Year 84
Civilian personnel to include benefits	212,705.00	276,590.00
Consumable supplies	175,654.00	135,247.00
Civilian contracts to include consultants	7,883.00	16,002.00
TDY	4,186.00	1,400.00
Publications	5,129.00	7,939.00
Noninvestment equipment (Minor MEDCASE)	7,365.00	--------
Other OMA		
OMA Total	412,922.00	437,178.00
MEDCASE	173,500.00	114,500.00
Other		
Military	465,444.00	482,072.00
TOTAL	1,051,866.00	1,033,750.00

E. Progress

Protocol Disposition FY 84

	Terminated	Completed	Ongoing to FY 85
FY 77	-	0	1
FY 78	1	0	1
FY 79	2	0	1
FY 80	2	0	0
FY 81*	5	5	8
FY 82	8	8	12
FY 83	23	27	26
FY 84	3	7	80
	44	47	129

*C-14-81 was reopened for additional studies.

Group Protocol Disposition FY 84

	Terminated	Completed	Ongoing to FY 85
SWOG	2	21	68
GOG	0	13	16
PVSG	0	0	1
POG	0	10	20
	2	44	105

F. Problems

During FY 84, principal issues concerned professional staffing and facilities. A manpower survey team recognized a requirement for 34 staff members but the department was given authority to fill only 22 of these positions. Enlisted strength fluctuated during the year and resulted in termination or delay of several protocols. Most of the enlisted problems were due to lack of MILPERCEN support for stabilized tours for our technicians. Without stabilization we are certain to terminate future protocols due to inadequate or inexperienced staff. This Department must be able to attract competent, proven scientists to maintain credibility within the research arena. This cannot be accomplished with only two research MSC authorizations (at the authorized grade of O-3), one MC, and one VC officer. The nucleus must be expanded to maintain a broad clinical investigation base and in addition the grade structure must be enhanced to provide incentives for career development and progression for scientists within the MEDCENs.

Renovation planning for the Laboratory Animal Facility is progressing slowly due to fiscal constraints. Inspection of our inadequate animal care facility by the American Association for Accreditation of Laboratory Animal Care has resulted in probational accreditation. A renovation project (which would have resulted in full accreditation and for which funds were allocated) was cancelled by the Fort Sam Directorate of Engineering and Housing. Since we will be unable to correct the deficiencies that led to the probational status, we will be unaccredited as of FY 85. The animal care issue is critical and needs to be

resolved. The Department is also in need of adequate space for studies with infectious agents (containment laboratories) and space for human volunteer studies. These issues are being addressed internally by the Department staff with the advice of the command staff.

Funds available for equipment procurement are not satisfactory and will fund only a portion of our requirements. Funds available for the Capital Equipment Expense Program ($1000-$3000) were totally lacking during FY 84. Supply monies (items <$1000) were adequate, only because of the decrease in completed and newly initiated protocols which was attributable to the sharp reduction in laboratory technicians in the Department.

TABLE OF CONTENTS

Code: C - Completed P - Published

O - Ongoing PR - Presentation

T - Terminated

DEPARTMENT OF THE ARMY
Brooke Army Medical Center
Fort Sam Houston, Texas 78234-6200
DEPARTMENT OF CLINICAL INVESTIGATION

PUBLICATIONS

DEPARTMENT OF CLINICAL INVESTIGATION

Allen, R.C. and Lieberman, M.M. Kinetic analysis of microbe opsonification based on stimulated polymorphonuclear leukocyte oxygenation activity. Infect. Immun. 45:475, 1984. (C)

Allen, R.C. and Via, C.S. Direct stimulation of neutrophil oxygenation activity by serum from patients with systemic lupus erythematosus: a relationship to disease activity. J. Rheumatol. (in press). (C)

Scott, R.McN., Eckels, K.H., Bancroft, W.H., Summers, P.L., McCown, J.M., Anderson, J.H., and Russell, P.K. Dengue-2 vaccine: dose response in subjects with and without yellow fever antibody. J. Infect. Dis., Dec 1983.

Ayala, E. Monoclonal antibodies to a ribosomal vaccine from P. aeruginosa. Proc. Amer. Soc. Microbiol. Mar 1984. (C)

Burleson, D.G. and Allen, R.A. Inhibition of the oxygenation activity of high buoyant density granulocytes and low buoyant density macrophages by cells of intermediate density. J. Reticuloendothel. Soc. 34:185, 1983. (C)

Gunn, B.A. et al. Chocolate agar, a differential medium for gram-positive cocci. J. Clin. Microbiol., (in press). (C)

Gunn, B.A., et al. The oropharynx and Streptococcus pyogenes cultures. Laboratory Medicine, (in press). (C)

Via, C.S. and Allen, R.A. Rheumatoid arthritis and membranous glomerulonephritis. A role for IC dissociative techniques. J. Rheumatol. (in press). (C)

DEPARTMENT OF DENTISTRY

Bilodeau, L.P., Moody, J.M., Rathbun, J.D., and Kraut, R.A. Evaluation of ECG changes in dentists treating awake patients. Anes. Prog., Nov./Dec., 1983. (C)

DEPARTMENT OF EMERGENCY AND AMBULATORY MEDICINE

Bickell, W.H. and Dice, W.H. Military antishock trousers in patients with adrenergic-resistant anaphylaxis. Ann. Emerg. Med. 13:189, 1984. (C)

Prescott, J.E., Johnson, J.E., and Dice, W.H. Polyarteritis nodosa presenting as seizures. Ann. Emerg. Med. 12:642, 1983.

DEPARTMENT OF MEDICINE

Office of the Chief

Carpenter, J.L. Mycobacterium chelonei. Arch. Int. Med. (in press) 1984.

Allergy and Immunology Service

Ramirez, D.A. The natural history of mountain cedar pollinosis. J. Allerg. Immunol. 73:88, 1984.

Cardiology Service

Bowman, M.A., Craig, W.E., Murgo, J.P., Rubal, B.J. Intraventricular systolic pressure gradient and left ventricular diastolic dysfunction in hypertrophic cardiomyopathy. Circulation 68(4) III-236, 1983.

Cox, W.R., Damore, S., Rubal, B.J. and Murgo, J.P. Left atrial myxoma: phonographic, echocardiographic and micromanometric hemodynamic correlations. South. Med. J. 77:237, 1984. (C)

Cox W.R. Exercise radionuclide angiography and thallium scintigraphy in anomalous coronary anatomy: a case report. South. Med. J., 1984.

Cox, W.R. et al. Radionuclide and thallium scintigraphy in anomalous coronary anatomy: a case report. South. Med. J., (In press), 1984.

Murgo, J.P., Alter, B.R., Dorethy, J.B., et al. The effects of intraventricular gradients on left ventricular ejection dynamics. Eur. Heart J. 4 Suppl F, 23, 1983. (C)

Murgo, J.P. and Westerhof, N. Input impedance of the pulmonary arterial system in normal man: effects of respiration and comparison to systemic impedance. Circ. Res. (in press). (C)

Nichols, W., Murgo, J., et al. Effect of age on aortic impedance in normal man. Circulation (4) III-131, 1983.

Pasipoularides, A., Damore, S., Miller, J., Rubal, B.J., Murgo, J. Left ventricular (LV) systolic dynamics in normal man. Circulation 68(4) III-305, 1983.

Pasipoularides, A., Murgo, J.P., Bird, J.J. and Craig, W.E. Fluid dynamics of aortic stenosis: mechanisms for the presence of subvalvular pressure gradients. Am. J. Physiol. Heart Circ. Physiol. 246:H542, 1984. (C)

Pasipoularides, A., Murgo, J.P. and Westerhof, N. Aortic input impedance and pressure waveforms in man. Proceedings of the 19th Annual Meeting of the Association for the Advancement of Medical Instrumentation, 1984. (C)

Pasipoularides, A., Miller, J., Rubal, B.H. and Murgo, J.P. Left ventricular ejection dynamics in normal man. Proceedings of the VIth International Conference and Workshop of the Cardiovascular System Dynamics Society, 1984. (C)

Pasipoularides, A., Palacios, I., Frist, W., Rosenthal, S., Newell, J.B., Powll, W.J. Jr. Activation-inactivation dynamics in hypoxic cat papillary muscles. Am. J. Physiol.: Regulatory Integrative Comp. Physiol. (in press) 1984.

Paulus, W.J., Bourdillon, P.D., Serizawa, T., Grossman, W., Pasipoularides, A. and Mirsky, I. Regional left ventricular diastolic properties during and after pacing induced ischemia in dogs with coronary stenoses. Am. J. Physiol.: heart Circ. Physiol. (in press), 1984.

Paulus, W., Lorell, B., Craig, W. et al. Comparison of the effects of nitroprusside and nifedipine on diastolic properties in patients with hypertorphic cardiomyopathy: altered left ventricular loading or improved muscle inactivation . J. Am. Col. Cardiol. 2:879, 1983. (C)

Rubal, B.J. Cardiac adaptations. J. Obesity and Weight Reg. Vol. 3, #438, 1984.

Vatner, S.F., Pasipoularides, A. and Mirsky I. Measurement of arterial prssure-dimension relationships and wall stiffness in conscious animals. Ann. Biomed. Eng. (in press), 1984.

Zumbrun, S.R., Rubal, B.J. and Murgo, J.P. Percutaneous transluminal coronary angiogplasty: a review of the initial Army experience. Milit. Med. 149:288, 1984. (C)

Dermatology Service

Coquilla, B.H. and Kraus, E.W. Trichosporsis (white piedra): four cases in the United Staes. J. Assoc. Milit. Dermatol. 9:2, Fall 1983.

Lewis, C.W. Erythropoietic protoprophyia. Photodermatology, Vol. 1, Aug. 1984. (C)

Lewis, C.W. Effect of neocyte exchange transfusions on prophyria. Internat. J. Dermatol. (in press) 1984. (C)

Salasche, S.J. Shave biopsies that count. J. Assoc. Milit. Dermatol. 9:2, Fall 1983. (C)

Salasche, S.J. Myxoid cysts of the proximal nail fold: a surgical approach. J. Dermatol. Surg. Oncol. 10:1, Jan. 1984.

Salasche, S.J. Status of curettage and desiccation in the treatment of primary basal cell carcinoma. J. Amer. Acad. Dermatol. 10/2:285, 198 . (C)

Salasche, S.J. and Roberts, L. Dog ear correciton by M-plasty. J. Dermatol. Surg. Oncol. June 1984.

General Medicine Service

Kroenke, K. Herpes esophagitis: esophageal stricture following herpes zoster. Milit. Med., Aug. 1984.

Kroenke, K. The lecture: where it wavers. Amer. J. Med., Sep. 1984.

Hematology Oncology Service

Bukowski, R.M., McCracken, J.D., Blacerzak, Sp. and Fabian, C.J. Phase II study of chlorozotocin in islet cell carcinoma. A Southwest Oncology Group Study. Cancer Chemother. Phartmacol. 11:48, 1983.

Chlebowski, R.T., Pugh, R.P., Bull, F., McCracken, J.D., Glass, A. and Bateman, J.R. Concomitant razoxane and doxorubicin treatment on a weekly schedule. Cancer Treat. Rep., 68,No. 7/8:1035, 1984.

Decker, D.A., Costanzi, J.J., McCracken, J.D. and Baker, L.H. Evaluation of gallium nitrate in metastatic or locally recurrent squamous cell carcinoma of the head and neck: a Southwest Oncology Group Study. Cancer Treat. Rep. 68:1047, Aug. 1984.

Troxell, M., Mills, G.M. and Allen, R.C. The hypereosinophilic syndrome in acute lymphocytic leukemia. Cancer 54:1058, Sep. 1984.

Witherspoon, R.P., Legha, S.S., Reimer, R.R., Talley, R.W., Stuckey, W.J., Dixon, D.O., McCracken, J.D., Stephens, R.L. and Oishi, N. Phase II trial of amsacrine in metastatic or locally recurrent squamous cell carcinoma from head and neck primaries: A Southwest Oncology Group Study. Cancer Treat. Rep. 68:435, 1984.

Infectious Disease Service

Carpenter, J.L. and McAllister, C.K. Anticoagulation in prosthetic valve endocarditis. South. Med. J. 76:1372, Nov. 1983.

Nephrology Service

Copley, J.B. Pyelonephritis. Conn's Current Therapy. Rakel R.E. (ed.), Philadelphia, W.B. Saunders Co., 36th Ed., 1984.

Copley, J.B., Bartram, L.S., Smith, B.J., Sandoval, J., James, M.K. and Hickman, R.O. Transabdominal angio-access catheter for long-term hemodialysis. Ann. Int. Med. 100:236, 1984.

Copley, J.B. and McDonnell, J.R. Allergic bronchopulmonary aspergillosis: A case report and comment on reliability of testing sources. Ann. Allergy. 2984.

Copley, J.B. and Moore, J. Goodpasture's syndrome: influence of treatment complications in therapeutic decisions. Milit. Med. 149:162, 1984.

Copley, J.B. and Hasbargen, J.A. "Primary" hematuria, a prospective evaluation. Kid. Intern. 25:161, 1984.

Copley, J.B. and Smith, B.J. CAPD and scleroderma. Amer. J. Kid. Dis. Abstracts, NKF, 1983.

Cushner, H., Barnes, J.L., Reineck, H.J. and Stein, J.H. Studies on the role of volume depletion in the pathophysiology of glycerol induced acute renal failure. Kid. Intern. 125:228, 1984.

Foulks, C.J. and Baldwin, C. Fogarty embolectomy of temporary hemodialysis catheters. Dial. Trans. 12:639, 1983.

Hasbargen J.A. and Copley, J.B. Utility of skin biopsy to include use of histamine in diagnosis of IgA nephropathy. Intern. Soc. Neph. Proceedings, June 1984. (C)

Johnson, J.E. and Wright, L.F. Thiazide-induced hyponatremia. So. Med. J. 76:1363, 1983.

Sjoberg, R.J., McMillan, V.M., Bartram, L.S. and Copley, J.B. Renal failure with minimal change nephrotic syndrome: reversal with hemodialysis. Clin. Neph. 20:98, 1983.

Smith, B.J. and Copley, J.B. CAPD training for the blind: a new methodology. Kid. Intern. 25:261, 1984.

Smith, B.J. and Copley, J.B. Modification of cardiopulmonary resuscitation procedure for hemodialysis patients. Dial. Trans. (in press) 1984.

Pulmonary Disease Service

Aldarondo, S., Carpenter, J.L., McAllister, C.K., Davis, C.E. and Sullivan, J.P. Drug resistant tuberculosis in South Texas. Abstr. Chest 84:351, 1983.

Aldarondo, S., Carpenter, J.D., McAllister, C.K., et al. Drug resistant tuberculosis. Amer. Rev. Resp. Dis. (in press) 1984

Fetters, L.J. and Matthews, J.I. Methacholine challenge test. Arch. Int. Med. May 1984. (C)

Matthews, J.I. and Richey, H.M. Bilateral infiltrates and bronchitis in a smoker. J. Resp. Dis. 4(11) 47, 1983.

Matthews, J.I. and Hunt, C.K. Sarcoidosis: reversal of symptoms twenty-one years after onset of disease. Arch. Int. Med. 144:168, 1984.

Matthews, J.I. Endobronchial tuberculosis simulating lung cancer. Chest (in press) 1984.

Richey, H.M., Matthews, J.I., Helsel, R.A. and Cable, H. Thoracic CT scanning in the staging of bronchogenic carcinoma. Chest 85:218, 1984.

Rheumatology Service

Via, C.S. Rheumatoid arthritis...dissociative techniques. J. Rheumatol. 11(2), 1984. (C)

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Hume, R.F., Lynch, S.C., Wallace, R.L. and Herrick, C.N. Physical fitness training program for the pregnant soldier. 1984

Wallace, R.L., Eglinton, G.S., Youkura, M.L. and Wallace, T.M. Extraperitoneal cesarean section: a surgical form of infection prophylaxis? Am. J. Obstet. Gynecol. 148:172, 1984.

DEPARTMENT OF PATHOLOGY AND ALS

Dudley, M. and Nauschuetz, W.F. Jr. Clinical evaluation of new AMS GSU-card. J. Med. Tech. (in press) 1984.

Dudley, M. and Nauschuetz, W.F. Jr. Clinical evaluation of the autommicrobic system gram-negative susceptibility urinary card. J. Med. Tech. (in press) 1984.

Gray, M.R. An efficacy trial of doxycycline chemoprophylaxis against leptospirosis. N.E.J.M. 310:497, 1984.

Johnson, J.E., Jeffery B.S. and Huppert, M. Evalution of five commercially available immunodiffusion kits for detection of Coccidioides immites and Histoplasma capsulatum antibodies. J. C. Micro. 20:530, 1984.

Juchau, S.V. and Nauschuetz, W.F. Jr. Evaluation of a leukocyte esterase and nitrite test strip for detection of bactiuria. Curr. Microbiol. (in press) 1984.

Nauschuetz, W.F. Jr. Methicillin resistant staph. J. Med. Tech. (in press) 1984.

Nauschuetz, W.F. Jr. and Juchau, S.V. Rapid detection of antibiotic methicillin - resistant staphylococci using an automated system. J. Med. Tech. (in press) 1984.

Perez, R. Mosman P. and Juchau, S.V. Experience with virocult as a viral collection and transportation system. Diag. Microbiol. Infect. Dis., Jan. 1984.

DEPARTMENT OF PEDIATRICS

Moffitt, D.R., Parry, W.H. and Merenstein, G.B. Transcutaneous monitoring of the infant with apnea. In "Continuous Transcutaneous Blood Gas Monitoring" Huch, R. and Huch A. (eds.), Marcel Dekker Inc., New York and Basel, 1984.

Nalle, L. Effect of resuscitative fluid on physical parameters of blood perfusing the brain. Am. J. Perinatol. Oct. 1983.

DEPARTMENT OF RADIOLOGY

Bennett, W.F. and Cox, H. Computed tomography of absent cervical pedicle. J. Computer. Axial Tomog. Jun 1984.

Bunker, S.R., Landry, A.J. and Hammes, C.S. Diffuse lung uptake of Tc-99m sulfur colloid in infectious mononucleosis. J. Nucl. Med. 24:1083, 1983.

Bunker, S.R. SPECT gated blood pool imaging: noninvasive techniques for determining chamber volumes. Clin. Nucl. Med. 9S, Mar. 1984.

Bunker, S.R., Landry, A., et al. Scintigraphy of gastrointestinal hemorrhage: superiority of 99mTc red blood cells over 99mTc sulfur colloid. Am. J. Roentgen. Sep. 1984.

Bunker, S.R. Spect hepatic scintigraphy "hot spot" localization. Clin. Nucl. Med. (in press) 1984.

Cawthon, M.A. et al. Tomographic Scintigraphy of a retrotracheal goiter. Clin. Nucl. Med. 9:1:45, 1984.

Cawthon, M.A. Tomographic thallium cardiac scintigraphy utilizing a rotating slant hole collimator. Clin. Nuclear Med. 9S, Mar. 1984.

Hartshorne, M.F. Fourier phase analysis in non-cyclic dynamic studies. Clin. Nucl. Med. 8:521, 1983.

Hartshorne, M.F. Multiple imaging techniques demonstrate a medullary carcinoma of the thyroid. Clin. Nucl. Med. 8:628, 1983.

Hartshorne, M.F. Ga-67 citrate in adult respiratory distress syndrome and unsuspected metastatic bronchogenic squamous cell carcinoma. Clin. Nucl. Med. 9:3:163, 1984.

Hartshorne, M.F. Chest radionuclide angiography in the evaluation of pulmonry masses. Clin Nucl. Med. 9S, 1984.

Hartshorne, M.F. Multiple imaging techniques CSF shunted Arnold Chiari malformation with false negative brain death radionuclide angiograms. Clin. Nucl. Med. (in press) 1984.

Huggins, M.J. Transhepatic removal of impacted intrahepatic and common duct stones: case report. Milit. Med. 148: 1983.

Karl, R.D., Jr. Skull scintigraphy. Intracranial osteoma. Clin. Nucl. Med. 8:626, 1983.

Karl, R.D., Jr. Dual isotope imaging to assist in the interpretation of Gallium-67 scintigrams. Clin. Nucl. Med. 9S, Mar. 1984.

Landry, A.J. Efficiency Tc-99m RBC labeling as a function of time. Clin. Nucl. Med. 9S, Mar. 1984.

Mayhood, C.S. Superiority of gated blood pool image filtration on the accuracy of ejection fraction determination. Clin. Nucl. Med. 9S, Mar. 1984.

Ramirez, H., Navarro, J. and Bennett, W.F. Cupid's bow, contour of the lumbar vertebral endplates detected by computed tomography. J. Computer Asst. Tomography, Feb. 1983.

Ramirez, H., Blatt, E., Cable, H.F., McComb, B.L., Zornoza, J. and Hibri, N.S. Intraosseous pneumatocysts of the ilium: findings on radiographs and CT scans. Radiology 150:503, 1984.

Ramirez, H. and Butler, H. Osteochondritis dissecans complicating Legg-Calve-Perthes Diseae. Orthopedic Review 13:217, 1984.

Ramirez, H., Huggins, M. and O'Keefe, T. Hemangioblastoma of the spinal cord. Amer. J. Roentgen. 12 Jun 1984.

Ramirez, R., Hibri, N. and Brennan, M.W. Recurrent subtemporal epidural hematoma with second, third and fourth cranial nerve compression. Computerized Radiol. 8:37, 1984.

Ramirez, R. Sonographic recognition of lissencephal (Agyria). Am. J. Neuroradiol. (in press) 1984

Schmidt, W.P. Superiority of SPECT over planar imaging quantitating hepatolienal distribution of radiocolloid. Clin. Nucl. Med. 9S, Mar. 1984.

DEPARTMENT OF SURGERY

Cardiothoracic Surgery

Bowman, G.A. and Rosenthal, D. Carcinoid tumors of the appendix. Amer. J. Surg. Dec. 1983.

Cohen, D.J. Intraoperative coronary artery spasm - a case report of a successfully treated patient. Ann. Thor. Surg. 36:97, 1983.

Cohen, D.J. Management of patients with malignant thymoma. J. Thor. Cardiovasc. Surg. 87:301, 1984.

Graeber G.M., Thompson, L.D., Cohen, D.J. et al. Cystic lesions of the thymus: an occasional malignant crvical and/or anterior mediastinal mass. J. Thor. Cardiovasc. Surg. 87:295, 1984.

Graeber, G.M., Gafferty, P.J., Wolf, R.E., Cohen, D.J. and Zajtchuk, R. Concentrations of creatine kinase and lactic dehydrogenase with the muscles encoutnered during median sternotomy and with the walls of the cardiac chambers. Surgical Form 34:337, 1983.

Shuck, J.W., Cohen I.S., Cohen, D.J. and Lough, F. Iatrogenic coronary artery aneurysm complicating bypass tract surgery. Am. J. Cardiol. 53:344, 1983.

General Surgery Service

Briggs, R.M., Walters, M. and Rosenthal, D. Cystosarcoma phylloides in adolescent females. Am. J. Surg. 146:712, 1983

Briggs, R.M., Jarstfer, B.S. and Collins, G.J. Anastomotic aneurysms. Am. J. Surg. 146:770, 1983.

Briggs, R.M. Current controversies in breast cancer. Univ. Tex. Press, 1984.

Grage, T.B. and Reed, K. Surgical management of radiation injuries to the GI tract. In "Advances in Gastrointestinal Surgery Year Book, Medic. Publishers, 1984.

Ravikumar, T.S., Sibley, R. and Reed, K. Renal toxicity of mitomycin D. Am. J. Clin. Oncol., Jun 1984.

Reed, K. Medical historiography. J. Am. Osteopath. Assc., June 1984.

Reed, K., Ravikumar, T.S., Gifford, R., et al. The associaton of Fanconi's anemia and squamous cell carcinoma. Cancer 52:926, 1983.

Rosenthal, D. Anorectal emergencies. In "Emergency Medicine Annual," Appleton, Century and Croft, June 1984.

Solla, J.A., Clary, R.M. and Rosenthal, D. Diagnostic peritoneal lavage - the Brooke Army Medical Center experience. Milit. Med. August 1984.

Neurological Surgery

Blumenkopf, B. Neuropharmacology on the DREZ. Neurosurgery (in press) 1984.

Blumenkopf, B. Coincident trigeminal neuropathy and hemifacial spasm relieved by microvascular decompression. J. Neurosurg. (in press) 1984.

Ophthalmology Service

Griffith, D. Intestinal giardiasis associated with ocular inflammtion. J. Clin. Gastroenterol. (in press) 1984.

Lloyd, W.C. III. Malignant melanoma of the lacrimal sac. Arch. Ophthal., Jan 84.

Lloyd, W.C. III. Surgical repair of medial wall fractures. Am. J. Ophthal., Mar 84.

Lloyd, W.C. III. Simple method of instant closeup photography. Am. J. Opthal. (in press) 1984.

LLoyd, W.C. III. Rapid prepartion of lecture slides using the computer. Ophthalmic Surg. 15:678, 1984.

Lloyd, W.C. III. Surgical management of hemodialysis patients. Opthal. Surg. 15:414, 1984.

O'Hara, M.A. Migrainous optic neuropathy. J. Clin. Neuro-Ophthal. March 1984.

Orthopaedic Surgery Service

Nash, W.C. Transchondral talar dome fractures - not just a sprained ankle. So. Med. J. May 1984.

Peters, V.J. Management of nail problems of upper and lower extremity. Cutis (in press) 1984.

Otolaryngology Service

Wittich, D.J. Cervical epidural anesthesia for head and neck surgery. Laryngoscope, May 1984.

Urology Service

Bryant, K., Thompson, I.M., Ortiz, R. and Spence C.R. Urethral paraganglioma presenting as a urethral polyp. J. Urol. 127:571, 1983.

Bryant, K.R., Norbeck, J.C., Sepulveda, R.A. and Spence, C.R. Coagulum pyelolithotomy using cryoprecipitate with and without thrombin: a comparative study. Proceedings of the Kimbrough Urological Seminar Newsletter, Nov. 1983.

Ernst, J., Thompson, I.M., Shumsky, E. and Spence, C.R. The effect of indomethacin on postobstructive diuresis. Proceedings of the Kimbrough Urological Seminar Newsletter, Nov. 1983.

Norbeck, J.C. Visual internal urethrotomy. Proceedings of the Kimbrough Urological Seminar Newsletter, Nov. 1983.

Sepulveda, R.A., Belville, W.D., Graeber, G.M. and Stuzman, R.E. Experimental penetrating renal trauma. J. Urol. May 1984.

Spence, C.R., Norbeck, J.C., Solomon, H.D. and Sepulveda, R.A. Cut·to·light - a dim view? Proceedings of the Kimbrough Urological Seminar Newsletter, Nov. 1983.

Teague, J.L., Thompson, I.M., Mora, R.V. and Spence, C.R. Hypermagnesemia associated with hemiacidrin irrigation. Proceedings of the Kimbrough Urological Seminar Newsletter, Nov. 1983.

Thompson, I.M., Ernst J., Gangai, M.P. and Spence, C.R. Adenocarcinoma of the prostate: results of routine urologic screening. Proceedings of the Kimbrough Urological Seminar Newsletter, Nov. 1983.

Thompson, I.M., Shumski, E.J., Lamm, D.L. and Spence, C.R. Bladder surface mucin: impact on implantation of transitional cell carcinoma of the bladder. Proceedings of the Kimbrough Urological Seminar Newsletter, Nov. 1983. (C)

Thompson, I.M., Mora, R.V., Gangai, M.P. and Spence, C.R. Treatment of childhood bilateral vas transection with cutaneous vasostomy. Milit. Med. 150: Mar. 20, 1984.

Thompson, I.M., Spence, C.R., Lamm, D.L. and DiLuzio, N.R. Immunochemothrapy of bladder carcinoma with glucan and cyclophosphamide. J. Urol. 131:273A, April 1984.

Thompson, I.M., Ernst, J.J., Gangai, M.P. and Spence, C.R. Adenocarcinoma of the prostate: results of routine urological screening. J. Urol. 132:690, 1984.

Thompson, I.M. and Mora, R.V. Hypermagnesemia associated with hemiacidrin irrigation. J. Urol. 132:741, 1984.

NUTRITIONAL CARE DIVISION

Turcotte, J.M., Vaden, A.G. and Hoyt, D.P. Recommendations of the National Commission on Allied Health Education: Priorities for the dietetic profession. J. Amer. Diet. Assoc. 83:531, 1983

PHARMACY SERVICE

Dasher, A. Pharmacy Services in Army Field Hospitals. Am. J. Hosp. Pharm., 1984.

Sikora, R. Effects of clinical pharmacy program in an Army Medical Center. Clinical Pharmacy, 1984.

Whisenant, A. Pharmacy technician training in the U.S. Army. Am. J. Hosp. Pharm. 1984.

DEPARTMENT OF THE ARMY
Brooke Army Medical Center
Fort Sam Houston, Texas 78234-6200
DEPARTMENT OF CLINICAL INVESTIGATION

PRESENTATIONS

Department of Clinical Investigation

Allen, R.C. Chemiluminescence as an approach to the study of phagocyte biochemistry and humoral immune mechanisms. Third Interntional Symposium o Analytical Applications of Bioluminescence and Chemiluminescence, Birmingham, Eng., 17-19 Apr 84. (C)

Allen, R.C. Chemiluminescence as an approach to the study of phagocyte biochemistry and humoral immune mechanisms. Institut fur Physiologische Chemie I, Universitat Dusselforf, Dusseldorf, West Germany, 25 Apr 84. (C)

Anderson, J.H., Jr. Complications associated with diabetes. University of Texas Health Science Center at San Antonio, Medical Grand Rounds, Feb 84.

Anderson, J.H., Jr. Faculty Member "Institutional Ethics Committees and Healthcare Decision Making." Westin Galeria, Houston, TX., 23-24 Feb 84.

Anderson, J.H., Jr. Use of human subjects in research. FDA-OPRR-NIH, Oklahoma City, Okla., 15-16 Mar 84.

Anderson, J.H., Jr. Use of human subjects in research, FDA-OPRR-NIH, New Orleans, LA, 9-10 Apr 84.

Anderson, J.H., Jr. Faculty Member "Conference on Ethics for a Categorical Institution." University of Texas, M.D. Anderson Hospital and Tumor Institute, Houston, TX, 26-28 Apr 84.

Anderson, J.H., Jr. Guest Lecturer Kerrville Medical Society, Kerrville, TX, Jun 84.

Ayala, E. Monoclonal antibodies to a ribosomal vaccine from P. aeruginosa. American Society of Microbiology, St. Louis, MO, 4-9 Mar 84. (C)

Burleson, D.G. Inhibition of the oxygenation activity of high buoyant density granulocytes and low buoyant density macrophages by cells fo intermediate buoyant density. 20th International Reticuloendothelial Society, Portland, OR, 9-12 Oct 83. (C)

Gunn, B.A. Carrers in microbiology. Kirby Junior High School, Kirby, TX, 3 May 84.

Gunn, B.A. Mission of the Department of Clinical Investigation in Military Medicine. Visiting Chaplains Conference. San Antonio, TX, 18 Jul 84.

Nemmers, T.M., Krikorian, D.J. Laser treated rat soft tissue injury. Mary Lipscomb Hamrick Army Medical Specialist Corps Research Course, Walter Reed Army Institute of Research, Washington, D.C., 25-27 Jul 84. (C)

Vaughn, G.K., Burleson, D.G., Allen, R.C. The peripheral blood mononuclear cell pattern of a patient with leukemic reticulo-endotheliosis: Characterization using monoclonal antibodies and flow cytometry. FACS User's Conference sponsored by Becton Dickinson. (C)

Department of Emergency and Ambulatory Medicine

Bickell, W.H. Effects of anti-shock trousers on the trauma score. A prospective analysis. Annual Meeting of the University Association of Emergency Medicine, 25 May 84. (C)

Department of Medicine

Office of the Chief

Pupa, L.E. Efficacy of morning report as a major teaching conference. National Conference for Chief Medical Residents, May 84.

Pupa, L.E. Analysis of factors that enhance compliance of General Medicine consultations to surgeons. National Conference for Chief Medical Residents, May 84.

Cardiology Service

Bickell, W.H., Geer, M.R. The hemodynamic response to rapid military anti-shock trouser deflation. American College of Emergency Physicians, Atlanta, GA, 24 Oct 83. (C)

Pasipoularides, A., et al. Left ventricular systolic dynamics in normal man. 56th Scientific Sessions of American Heart Association, Anaheim, CA, 14-17 Nov 83. (C)

Bowman, M.A., et al. Intraventricular systolic pressure gradient and left ventricular diastolic dysfunction in hypertrophic cardiomyopathy. 56th Scientific Sessions of American Heart Association, Anaheim, CA, 14-17 Nov 83. (C)

Nichols, W., Murgo, Jr. Effect of age on aortic impedance in normal man. 56th Scientific Sessions of American Heart Association, Anaheim, CA, 14-17 Nov 83. (C)

Murgo, J.. Update on hypertrophic cardiomyopathy. 33rd Annual Scientific Sessions, American College of Cardiology, Dallas, TX, 26 Mar 84. (C)

Pasipoularides, A., Murgo, J.P., Westerhof, N. Aortic input impedance and pressure waveforms in man. Invited lecture at Assocaiton for the Advancement of Medical Instrumentation, Washington, DC, 14-18 Apr 84.

Schatz, R.A., Brown, D.L., Damore, S. Percutaneous transluminal coronary angioplasty (PTCA) at Brooke Army Medical Center. Army Association of Cardiology, Walter Reed Army Medical Center, Washington, DC, 18-20 Apr 84.

Garcia, J.C., Layton, S.A., Rubal, B.J., Murgo, J.P. High fidelity intravascular phonocardiography. Army Association of Cardiology, Walter Reed Army Medical Center, Washington, DC, 18-20 Apr 84.

Bailey, S.R., Craig, W.E., Layton, S., Murgo, JP. High resolution digital subtraction angiography: application to left ventricular and coronary cineangiography. Army Association of Cardiology, Walter Reed Army Medical Center, Washington, DC, 18-20 Apr 84.

Murray, T., Bailey, S., Rubal, B., Murgo, J. Current status of Army rehabilitation programs. Army Association of Cardiology, Walter Reed Army Medical Center, Washington, DC, 18-20 Apr 84.

Cox, W.R., Rubal, B.J., Murgo, J.P. Peripheral pulse charcteristics in the upper extremity of man at rest and during exercise. Army Association of Cardiology, Walter Reed Army Medical Center, Washington, DC, 18-20 Apr 84.

Hoadley, S.D., Murgo, J.P., Rubal, B.J., Damore, S. Right heart ejection dynamics in aortic stenosis: association with abnormal splitting of the second heart sound. American Federation for Clinical Research, Washington, DC, 4 May 84.

Craig, W.E. Modification of non-uniformity by cardioactive drugs: hypertrophic cardiomyopathy. Antwerp-La Jolla Research Conferences on Cardiac Function, Antwerp, Belgium, 2-4 Jul 84.

Dermatology Service

Clemons, D.E. Lennert's lymphoma. Southern Medical Association Meeting, Baltimore, MD, 7 Nov 83.

Clemons, D.E. Self-assessment exam for skin oncology. American College of Chemosurgery Annual Meeting, Chicago, IL, 30 Nov 83.

McCullough, ML. Silica reaction simulating necrobiotic granuloma. American Academy of Dermatology Annual Meeting, Chicago, IL, 1 Dec 83.

Salasche, S.J. Surgical anatomy - basic surgery course. American Academy of Dermatology Annual Meeting, Chicago, IL, 1 Dec 83.

Coquilla, B.H. White piedra - a report of four cases in the United States. American Academy of Dermatology Annual Meeting, Chicago, IL, 2 Dec 83.

Salasche, S.J. Focal mucinosis (myxoid cyst) - surgical management. American Academy of Dermatology Annual Meeting, Chicago, IL, 2 Dec 83.

Salasche, S.J. Basic surgery instructor. American Academy of Dermatology Annual Meeting, Chicago, IL, 3 Dec 83.

Lewis, C.W. The use of combined plasmapheresis and neocyte exchange in the treatment of porphyrias. Grand Rounds, University of Texas Health Science, San Antonio, TX, 8 Feb 84. (C)

Salasche, S.J. Myxoid cysts of the proximal nail fold: A surgical approach. American Society for Dermatologic Surgery Meeting, Maui, HI, 16 Feb 84.

Grabski, W.J. Management of temporal nerve injuries. American Society for Dermatologic Surgery Meeting, Maui, HI, 20 Feb 84.

Salasche, S.J. Cutaneous oncology, Hilton Hotel, San Antonio, TX, 21 Apr 84.

Salasche, S.J. Surgery rounds. Brown University, Providence, RI, 14 May 84.

Salasche, S.J. Dermatology surgery pearls. Brown University, Providence, RI, 16 May 84.

Salasche, S.J. NIH workshop on chemoprevention "recruitment", Bethesda, MD, 17 May 84.

Winton, G.B. Dermatoses of pregnancy: Differential diagnosis and approach to the patient. Wisconsin Dermatologic Society Meeting, Lake Geneva, WI, 3 Aug 84.

Winton, G.B. Dermatoses of pregnancy: 1984 update. Wisconsin Dermatologic Society Meeting, Lake Geneva, WI, 4 Aug 84.

Gastroenterology Service

Goldner, F. Non-surgical management of upper gastrointestinal hemorrhage. Current Concepts in Internal Medicine, Letterman Army Medical Center, Oct 83.

Austin, F.H. Endoscopic sclerotherapy of esophageal varices. Texas Society of Gastrointestinal Endoscopists, San Antonio, TX, Nov 83.

General Medicine Service

Hanley, J. Accelerated hypertension. Association of Military Osteopathic Physicians, 30 Mar 84.

Callsen, M. Polypharmacy of type II diabetes mellitus. American Diabetes Association 44th Annual Meeting and Scientific Sessions, Las Vegas, NV, 12 Jun 84.

Hematology-Oncology Service

Troxell, M.L., et al. The use of intravenous etidronate didronel (EHDP) in the management of malignant hypercalcemia. 4th Annual Army Hematology-Oncology Symposium, Seattle, WA, 7-9 Feb 84.

Jordan, W.A., Shildt, R.A., Clark, G. Adenocarcinoma of unknown primary site: The BAMC experience. 4th Annual Army Hematology-Oncology Symposium, Seattle, WA, 7-9 Feb 84.

Friess, G., McCracken, J., Clark, G., Troxell, M. Improved long term survival associated with surgery in limited small cell cancer of the lung (SCCL). A Southwest Oncology Group Study. American Society Clinical Oncology, Toronto, Canada, May 84.

Harvey, W.A. Early evaluation of fludarabine phosphate in colon cancer, Phase II. Southwest Oncology Group Conference, Phoenix, AZ, 13-14 Sep 84.

Infectious Disease Service

Davis, C.E., Jr. In vitro susceptibility of Mycobacterium avium intracellulare to antibacterial agents. Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Las Vegas, NV, Oct 83.

McAllister, C.K. Current concepts of meningitis therapy. U.S. Army Neurology Meeting, Academy of Health Sciences, Fort Sam Houston, TX, Nov 83.

Hawkes, C.A. Comparative studies of macrophage chemotaxis in response to Entamoeba Histolytica. American Society of Tropical Medicine and Hygiene, San Antonio, TX, Dec 83.

Davis, C.E., Jr. In vitro susceptibility of Mycobacterium avium intracellulare to antibacterial agents. Tuberculosis and Mycobacterial Diseases Conference, San Antonio, TX, Dec 83.

Davis, C.E., Jr. Rifampin-induced acute renal failure. Tuberculosis and Mycobacterial Diseases Conference, San Antonio, TX, Dec 83.

Hawkes, C.A. Selective defect in macrophage chemotaxis in experimental amebiasis. International Conference of Tropical Medicine, Calgary, Canada, Sep 84.

Nephrology Service

Copley, J.B., Hasbargen, J.A. "Primary" hematuria, a prospective evaluation. American Society of Nephrology, Washington, DC, 83. (C)

Cushner, H., Barnes, J.L. Studies of the role of volume depletion in the pathophysiology of glycerol induced acute renal failure. American Society of Nephrology, Washington, DC, 83.

Hasbargen, J.A., Copley, J.B. Utility of skin biopsy to include use of histamine in diagnosis of IgA nephropathy. International Society of Nephrology, Los Angeles, CA, 84.

Pulmonary Disease Service

Matthews, J.I. Pulmonary problems. 6AF4 Armed Forces Entrance Medical Examiners' Course, Academy of Health Sciences, San Antonio, TX, 20 Oct 83.

Aldarondo, S. Drug resistant tuberculosis in South Texas. 49th Annual Scientific Assembly of the American College of Chest Physicians, Chicago, IL, 23-27 Oct 83.

Richey, H.M. Thoracic CT scanning in the staging of bronchogenic carcinoma. American College of Chest Physicians, Chicago, IL, 23-27 Oct 83.

Aldarondo, S. Drug resistant tuberculosis in South Texas. American Lung Association, San Antonio, TX, 14-16 Dec 83.

Glendening, D.L. A decade of MICU experience. Carl W. Tempel Symposium on Pulmonary Diseases, Fitzsimons Army Medical Center, Denver, CO, 23-25 Jan 84.

Aldarondo, S. Mycobacterium avium pulmonary disease: a review of experience at a major TB treatment center in Texas. Carl W. Tempel Symposium on Pulmonary Diseases, Fitzsimons Army Medical Center, Denver, CO, 23-25 Jan 84.

Ewald, F.W., Jr. Mechanisms of exercise limitation in patients with obstructive lung disease. Carl W. Tempel Symposium on Pulmonary Disease, Fitzsimons Army Medical Center, Denver, CO, 23-25 Jan 84.

Blanton, H.M. Utility of bronchoscopy in evaluating sputum negative patients with an abnormal chest x-ray and positive PPD. Carl W. Tempel Symposium on Pulmonary Diseases, Fitzsimons Army Medical Center, Denver, CO, 23-25 Jan 84.

Matarese, S.L. Zinc chloride (smoke bomb) inhalation injury. Carl. W. Tempel Symposium on Pulmonary Diseases, Fitzsimons Army Medical Cneter, Denver, CO, 23-25 Jan 84.

Department of Obstetrics and Gynecology

Wallace, R.L. External cephalic version with tocolysis. 32nd Annual Armed Forces Seminar on Obstetrics and Gynecology, Las Vegas, NV, 9-13 Oct 83.

Jeffreys, C.A., Jr. Cesarean section prophylaxis: Intrauterine lavage vs. intravenous prophylaxis. 32nd Annual Armed Forces Seminar on Obstetrics and Gynecology, Las Vegas, NV, 9-13 Oct 83.

Jeffreys, C.A., Jr. Fetus papyraceous and multiple congenital anomalies: A case report. 32nd Annual Armed Forces Seminar on Obstetrics and Gynecology, Las Vegas, NV, 9-13 Oct 83.

Jeffreys, C.A., Jr. Human sexuality in marriage. Department of Ministry and Pastoral Care Conference, San Antonio, TX, 6 Feb 84.

Downey, G.O. Urodynamics. OB-GYN Staff, U.S. Army Hospital, Fort Polk, LA, 22 Feb 84.

Capen, C.V. Ovarian cancer. Santa Rosa Cancer Conference, San Antonio, TX, 11 May 84.

Capen, C.V. The menopause state. OB-GYN Staff and Nurse Clinicians, Darnall Army Hospital, Fort Hood, TX, 9 May 84.

Wallace, R.L. Fetal monitoring. OB-GYN Staff and Family Practice Staff, Reynolds Army Hospital, Fort Sill, OK, 16 May 84.

Department of Pathology and ALS

Juchau, S.V. Evaluation of the LN Chemstrip for the detection of bacteruria. Texas Branch, American Society for Microbiology, 3 Feb 84.

Gray, M.R. Role and mission of the Veterinary Laboratory Service. 1984 Veterinary Officer Class, Academy of Health Sciences, Fort Sam Houston, Tx, 8 Feb 84.

Gray, M.R. Submission and analysis of perishable and semiperishable food products. 1984 Veterinary Inspectors Installation Workshop, 23 Feb 84.

Nauschuetz, W.F., Juchau, S.V. Comparison of API StaphIdent System and the Automicrobic System Gram Positive Identification Card for the identification of staphylococci. American Society for Microbiology, 7 Mar 84.

Nauschuetz, W.F. Use of the leukocyte esterase and nitrate reactions for predicting colony-forming units/ml of bacteria in urine. American Society for Microbiology, 8 Mar 84.

Juchau, S.V. Evaluation of the LN Chemstrip for the detection of bacteriuria. Society of Armed Forces Medical Laboratory Scientists, 9 Mar 84.

Gray, M.R. Leptospirosis. 1984 ASCP Medical Technology Students, 9 Mar 84.

Allen, R.C. Chairman of Session 6, "Phagocytosis Part 1." Third International Symposium on Analytical Applications of Bioluminescence and Chemiluminescence, Birmingham, England, 18 Apr 84.

Allen, R.C. Plenary Lecture of Session 7, "Phagocytosis Part 2." Third International Symposium on Analytical Applications of Bioluminescence and Chemiluminescence, Birmingham, England, 29 Apr 84.

Allen, R.C. Invited lecture. Institut fur Physiologische Chemie I, Universitat Dusseldorf, Dusseldorf, West Germany, 25 Apr 84.

Allen, R.C. Invited Lecture. University of Cambridge, Department of Pathology, Downing Site, Cambridge, England, 27 Apr 84.

Allen, R.C., Invited Discussant for Presentation 22. Fourth Annual Meeting of the Surgical Infection Society, Montreal, Canada, 1 May 84.

Farr, W.D. Injury pattern analysis of helicopter wire strike accidents. Annual Scientific Meeting of the Aerospace Medical Association, 10 May 84.

Department of Pediatrics

Takao, R. Approach to the adolescent. Wilford Hall Medical Center, San Antonio, TX, 13 Oct 83.

Gold, L. Developmental pediatrics. Children's Mercy Hospital, Kansas City, MO, 9-12 Nov 83.

Parry, W.H. Desquamative interstitial pneumonitis. Nurnberg Pediatric Conference, Nurnberg, Germany, 6-8 Dec 83.

Parry, W.H. Pulmonary anatomy and physiology. Nurnberg Pediatric Conference, Nurnberg, Germany, 6-8 Dec 83.

Parry, W.H., Critical evaluation of croup and epiglottitis. Nurnberg Pediatric Conference, Nurnberg, Germany, 6-8 Dec 83.

Parry, W.H. Tuberculosis of childhood. Nurnberg Pediatric Conference, Nurnberg, Germany, 6-8 Dec 83.

Parry, W.H. Outpatient management of asthma. Nurnberg Pediatric Conference, Nurnberg, Germany, 6-8 Dec 83.

Parry, W.H. Current management of status asthmaticus and life threatening status asthmaticus. Nurnberg Pediatric Conference, Nurnberg, Germany, 6-8 Dec 83.

Takao, R. Communicating with the adolescent. BAMC Satellite TV Program, Fort Sam Houston, TX, 19 Jan 84.

Takao, R. Contemporary adolescence. Secondary Staff, NEISD, Churchill High School, San Antonio, TX, 23 Jan 84.

Takao, R. Infant and child health care. Joske's Baby Fair, North Star Mall, San Antonio, TX, 9 Jun 84.

Gold, L.F. The learning disabled child - medical, psychological, and education prospectives. Northside ISD Special Education Division, San Antonio, TX, 21 Aug 84.

Gold L.F. The learning disabled child - medical, psychological, and education prospectives. Harlandale ISD Special Education Division, San Antonio, TX, 22 Aug 84.

Gold, L.F. The exceptional family member functional coding system. HQDA Army Community Service Annual Training Workshop, 15 Aug 84.

Department of Psychiatry

Gaupp, P.A. Seizure disorders in children. Fort Worth Child Study Center's Annual Conference on Neuropsychological Assessment of Children, Fort Worth, TX, 4 Nov 83.

Schultheis, W.F. Psychiatric emergencies. Association of Military Osteopathic Physicians, 29 Mar 84.

Schultheis, W.F. Clinical consultant and clinical director interface: Formula for success. Clinical Consultants Conference, 28 Aug 84.

Department of Radiology

Bunker, S.R. Evaluation of skin graft viability using Xe-133 saline clearance rates. 8th Annual Western Regional Mtg of the Society of Nuclear Medicine, Oct 83.

Hartshorne, M.F. Gallium-67 Technetium-99m Medronate ratio imaging in early rabbit osteomyelitis. 8th Annual Western Regional Mtg of the Society of Nuclear Medicine, Oct 83.

Cawthon, M.A. Quantitative emission cardiac tomography with a rotating dual slant collimator. 8th Annual Western Regional Mtg of the Society of Nuclear Medicine, Oct 83.

Hartshorne, M.F. Gallium-67 Technetium-99m MDP ratio imaging in acute osteomyelitis and fractures in the rabbit model. San Antonio Society of Nuclear Medicine, San Antonio, TX, Oct 83.

Bunker, S.R. Early clinical experience with SPECT imaging. MDS Annual Users' Meeting, Oct 83.

Redd, R.R. Newborn chest film interpretation. Texas Society for Respiratory Therapy, Oct 83.

Karl, R.D. Radiology for Physical Therapists (spine and pelvis). St John's Queens Hospital Division, Elmhurst, NY, 21-23 Oct 83.

Huggins, M.J. Tutorial Presentation UTSA Medical Student Anatomy Crs, Anatomic/Pathologic/Radiologic Correlation, San Antonio, TX, Dec 83.

Howard, W.H. Radionuclide assessment of GI hemorrhage. University of Texas Health Science Center, San Antonio, TX, Dec 83.

Blatt, E.S. Chest radiography. Education Course for Nursing Education and Training, Dec 83.

Karl, R.D., Jr. Cardiovascular flow studies. University of Texas at San Antonio, Jan 84.

Karl, R.D., Jr. Radiographic assessment of the spine and pelvis. Community Hospital of Indianapolis, Indianapolis, IN, Jan 84.

Karl, R.D., Jr. Introductory radiology of the spine. Western New York Physical Therapy Management Forum of Millard Millmore Hospital, Buffalo, NY, Feb 84.

Bunker, S.R. Gastrointestinal tract scintigraphy. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Bunker, S.R. SPECT gated blood pool imaging: Noninvasive techniques for determining chamber volumes. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Cawthon, M.A. Tomographic thallium cardiac scintigraphy utilizing a rotating slant hole collimator. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Landry, A.J. Efficiency Tc-99m RBC labeling as a function of time. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Mayhood, C.S. Superiority of gated blood pool image filtration on the accuracy of ejection fraction determination. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Schmidt, W.P. Superiority of SPECT over planar imaging quantitating hepatolienal distribution of radiocolloid. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Hartshorne, M.F. Chest radionuclide angiography in the evaluation of pulmonary masses. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Karl, R.D., Jr. Dual isotope imaging to assist in the interpretation of Gallium-67 scintigrams. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Howard, W.H. III. Laser repositioning device for quantitative exercise thallium examination. SW Chapter Society of Nuclear Medicine Annual Meeting, Houston, TX, Mar 84.

Redd, R.A. Neonatal chest. Association of Respiratory Therapists, San Antonio, TX, 9 Jun 84.

Redd, R.A. General orientation to chest x-rays. Nurse Anesthetist Course, Academy of Health Sciences, FSHTX, 84.

Baikadi, M. Long term results of a study combining simultaneous chemotherapy-radiotherapy in advanced head and neck cancer, and comparison to findings from the litearture. Fourth International Congress of CRILA, Buenos Aires, Mar 84.

Hartshorne, M.F. Nuclear Medicine Conference #1. University of New Mexico School of Medicine, Department of Radiology, Albuquerque, NM, Apr 84.

Hartshorne, M.F. Nuclear Medicine Conference #2. University of New Mexico School of Medicine, Department of Radiology, Albuquerque, NM, Apr 84.

Landry, A.J. Nuclear Pharmacy Practice. Academy of Health Sciences, Fort Sam Houston, TX, Apr 84.

Karl, R.D. Introductory course in radiology of the spine. Upstate University, Syracuse, NY, Apr 84.

Bunker, S.R. Initial clinical experience with SPECT. University of Texas Health Science Center, San Antonio, TX, Apr 84.

Bunker, S.R. Nuclear cardiology: The basics. Department of Radiology, DeTar Hospital, Victoria, TX, Apr 84.

Bunker, S.R. Gated radionuclide ventriculography. Department of Radiology, DeTar Hospital, Victoria, TX, Apr 84.

Bunker, S.R. Exercise 201-thallium studies. Department of Radiology, DeTar Hospital, Victoria, TX, Apr 84.

Landry, A.J. Introduction to Nuclear Pharmacy. Academy of Health Sciences, Fort Sam Houston, TX, May 84.

Landry, A.J. Current trends in Nuclear Pharmacy. Academy of Health Sciences, Fort Sam Houston, TX, May 84.

Cawthon, M.A. Tomographic thallium cardiac scintigraphy utilizing a rotating slant hole collimator. San Antonio Society of Nuclear Medicine, San Antonio, TX, May 84.

Karl, R.D., Jr. Dual isotope imaging to assist in the interpretation of gallium-67 scintigrams. San Antonio Society of Nuclear Medicine, San Antonio, TX, May 84.

Bauman, J.M. Chest radionuclide angiography in the evaluation of pulmonary masses. San Antonio Society of Nuclear Medicine, San Antonio, TX, May 84.

Landry, A.J. Cellular blood component labeling. Army Pharmaceutical Management Seminar, Denver, CO, Jun 84.

Bauman, J.M. Introduction to ACLS. Nurse Anesthetist Course, Academy of Health Sciences, Fort Sam Houston, TX, Jun 84.

Bunker, S.R. Digital filtering theory and applications. Society of Nuclear Medicine 31st Annual Meeting, Los Angeles, CA, Jun 84.

Bunker, S.R. Phase analysis. Society of Nuclear Medicine 31st Annual Meeting, Los Angeles, CA, Jun 84.

Landry, A.J. Nuclear Pharmacy. Nuclear Medicine Technology Students, Incarnate Word College, San Antonio, TX, 18 Spe 84.

Landry, A.J. Current trends in Nuclear Pharmacy. Academy of Health Sciences, C-26 Calss, 26 Sep 84.

Department of Surgery

Anesthesia and Operative Service

Middaugh, R.E. Arterial blood gases and intubation. Santa Rosa Department of Emergency Room Nurses, San Antonio, TX, 28 Oct 83.

Lawler, G.N. Intra-operative fluid management. TV Satellite Presentation, Academy of Health Sciences, Fort Sam Houston, TX, 31 Oct 83.

Menk, E.J. Intubation with semi-rigid light tipped stylet (Poster Presentation). 37th Postgraduate Assembly in Anesthesiology, New York, City, NY, 10-14 Dec 83.

Reynolds, W.J. Anesthetic implications of the asthmatic patient. Anesthesia Service, Fitzsimons AMC, Denver, CO, 1 Feb 84.

Middaugh, R.E. Intubation with semi-rigid light tipped stylet (Poster Presentation). International Research Society Meeting, Reno NV, 10-14 Mar 84.

Middaugh, R.E. Verbal induction techniques for the pediatric patient. Anesthesia Department, Mayo Clinic, Rochester, MN, 25-26 Apr 84.

Middaugh, R.E. Obstetrical anesthesia - controversies and new ideas. Anesthesia Department, Mayo Clinic, Rochester, MN, 25-26 Apr 84.

Middaugh, R.E. Advanced cardiac life support - an overview. Army Nurse Corps Anesthesia Course, Academy of Health Sciences, Fort Sam Houston, TX, 18 Jun 84.

Reynolds, W.J. What to expect out there. Graduation Address Nurse Anesthetist Class, Academy of Health Sciences, Fort Sam Houston, TX, 10 Jul 84.

Reynolds, W.J. Anesthesia for major trauma. Oklahoma Society of Anesthesiologists, 23-25 Aug 84.

Reynolds, W.J. Anesthesia for patients with major burns. Oklahoma Society of Anesthesiologists, 23-25 Aug 84.

Cardiothoracic Surgery Service

Zajtchuk, R., Head, H.D., et al. Management of primary cardiac tumors. American College of Surgeons Clinical Congress, Atlanta, GA, 16-21 Oct 83.

Peake, J.B., Cohen, D.J., Schuchmann, G.F., et al. Scimitar syndrome - Anatomy and surgical techniques. American College of Surgeons Clinical Congress, Atlanta, GA, 16-21 Oct 83.

Baker, J.R., Reid, R., Head, H.D., Cohen, D.J., et al. ELISA assay for anti-heart antibodies. Carl Temple Symposium for Allergy, Immunology and Pulmonology, Fitzsimons AMC, Denver, CO, 23-25 Jan 84.

Cohen, D.J. Evaluation of the angelchik antireflux prosthesis using a model for esophageal reflux in rhesus monkeys. 13th William Beaumont GI Symposium, El Paso, TX, 20-22 Mar 84.

Peake, J.B., Cohen, D.J. Scimitar syndrome. Exhibit at American College of Cardiology, Dallas, TX, 25-29 Mar 84.

Head, H.D., Peake, J.B. Late funcitional results in active duty patients following coronary artery revascularization. 13th Annual Session of the Association of Army Cardiology 18-20 Apr 84.

Fall, S.M., Head, H.D., et al. Preventing ventricular fibrillation after aortic cross clamping. 13th Annual Session of the Association of Army Cardiology 18-20 Apr 84.

Peake, J.B., Collins, G.H., Harris, R. Movie: "Giant intrathoracic plexiform neurofibroma with intraspinal extension." 13th Annual Session of the Association of Army Cardiology, 18-20 Apr 84.

Cohen, D.J., Benjamin, S.B., Graeber, G.M., et al. Evaluation of the angelchik antireflux prosthesis using a model for esophageal reflux in rhesus monkeys. 36th Meeting of Southwestern Surgical Congress, Honolulu and Maui, HI, 21-28 Apr 84.

Cohen, D.J., et al. Results of coronary artery bypass grafting in youg patients under age 35. National Heart, Lung and Blood Institute, 13-14 May 84.

Grishkin, B.A. Coronary artery surgery. Health Services Comman Satellite Television Network, 18 Jun 84.

Head, H.D., Peake, J.B. Impact of coronary artery bypass surgery in active duty soldiers. BAMC Hour, Satellite TV Network, US Army Health Services Command, 17 Sep 84.

General Surgery Service

Rosenthal, D. Management of diverticulosis. Tripler Army Hospital, Honolulu, HI, 11-13 Dec 83.

Rosenthal, D. Anatomy and management of groin hernias. Tripler Army Hospital, Honolulu, HI, 11-13 Dec 83.

Rosenthal, D. Common anorectal problems. Tripler Army Hospital, Honolulu, HI, 11-13 Dec 83.

Rosenthal, D. Update on the indications for colostomy formation. South Central Regional Enterostomal Therapy Meeting, San Antonio, TX, 14 Oct 83.

Kunkel, J. Complications of carotid endarterectomies. Southwest Surgical Congress, Honolulu, HI, May 84.

Rosenthal, D. Prevention and control of colorectal cancer. American Cancer Society Annual Regional Meeting, El Dorado, AR, May 84

Rosenthal, D. Anorectal fistulas. Grand Rounds, University of Texas Health Science Center at San Antonio, Department of Surgery, San Antonio, TX, Jun 84.

Reed, K. Milestones in gynecological surgery. American College of Osteopathic Surgeons, FL, Jun 84.

Dowden, D. Acalculus cholecystitis in burn patients. Gary P. Wratten Surgical Symposium, Washington, DC, Apr 84.

Hamelink, J. Acute mesenteric ischemia. Gary P. Wratten Surgical Symposium, Washington, DC, Apr 84.

Smith, A. Abdominal emergencies in cancer patients. Gary P. Wratten Surgical Symposium, Washington, DC, Apr 84.

Wesen, C. In-vitro labelled Tc-99 RBC in the diagnosis of lower GI bleeding. Gary P. Wratten Symposium, Washington, DC, Apr 84.

Rosenthal, D. Advanced trauma life support. Uniformed Services University of the Health Sciences, Bethesda, MD, 24-26 Jul 84.

Reed, K. Lumpectomy and radiation therapy for primary breast cancer. Satellite TV presentation, 25 Jul 84.

Reed, K. Conservative management of breast carcinoma. Grand Rounds, University of Texas Health Science Center, San Antonio, TX, 24 Aug 84.

Elliott, B. Noninvasive diagnosis of vasculogenic impotence. Chesapeake Vascular Society, Anapolis, MD, 20 Sep 84.

Solenberger, R. BAMC experience - Porta-cath IV infusion devices - 13 patients. Pediatric Oncology Group, St. Louis, MO, Sep 84.

Neurosurgery Service

Youngblood, L.A. Spinal cord injury. Satellite TV Presentation, U.S. Army Health Services Command, Fort Sam Houston, TX, 24 Oct 83.

Youngblood, L.A. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 25 Oct 83.

Blumenkopf, B. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 29 Nov 83.

Youngblood, L.A. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 31 Jan 84.

Blumenkopf, B. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 28 Feb 84.

Youngblood, L.A. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 27 Mar 84.

Blumenkopf, B. Neuropharmacology of the dorsal root entry zone. 1st World Congress, Schmerz-Zentrom Mainz, Alice-Hospital, Mainz, West Germany, 9-12 Mar 84.

Youngblood, L.A. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 24 Apr 84.

Blumenkopf, B. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 29 May 84.

Youngblood, L.A. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 26 Jun 84.

Youngblood, L.A. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 31 Jul 84.

Youngblood, L.A. Brain death. South Texas Organ Bank, 3 Aug 84.

Blumenkopf, B. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 28 Aug 84.

Youngblood, L.A. Surgical management of head injury. Association of Operating Room Nurses, San Antonio, TX, 15 Sep 84.

Youngblood, L.A. Case presentations and discussions. San Antonio Neurosurgical Society (Fred Kingman Neurosciences Society), San Antonio, TX, 25 Sep 84.

Opthalmology Service

Griffith, D.G. Inflammatory diseases of the fundus. University of Texas Health Science Center, San Antonio, TX, 21 Oct 83.

Bode, D. Keratometry. University of Texas Health Science Center, San Antonio, TX, 26 Oct 83.

Bode, D. Red eye. University of Texas Health Science Center, San Antonio, TX, 30 Nov 83.

Bode, D. Conjunctivitis. University of Texas Health Science Center, San Antonio, Tx, 30 Nov 83.

Bode, D. Endophthalmitis. El Paso Ophthalmology Society, William Beaumont Army Medical Center, El Paso, TX, 29 Nov 83.

Bode, D. Keratometry. El Paso Ophthalmology Society, William Beaumont Army Medical Center, El Paso, TX, 29 Nov 83.

Lloyd, W.C., III. Surgical management of the hemodialysis patients. 88th Annual Meeting of American Acdemy of Ophthalmology, Chicago, IL, Nov 83.

Knapp, W.B. Patient problem stimulation - differential diagnosis of ocular pathology by computer. American Academy of Optometry, Association of Schools and Colleges of Optometry, 14 Dec 83.

Griffith, D.G. Title not available. Walter Reed Army Medical Center, Washington, DC, 26 Mar 84.

Bode, D. Title not available. Walter Reed Army Medical Center, Washington, DC, 26 Mar 84.

Davitt, W. Eye surgery. OR Nurse Course, Academy of Health Sciences, Fort Sam Houston, TX, 12 Mar 84.

Board, R. Avoiding complications with adjustable sutures. Walter Reed Army Medical Center Biennial Ophthalmology Meeting, Washington, DC, 26 Mar 84.

Griffith, D.G. Retinal dystrophies. Tripler Army Medical Center, Honolulu, HI, 3 Apr 84.

Griffith, D.G. Congenital anomalies of the posterior globe. Tripler Army Medical Center, Honolulu, HI, 4 Apr 84.

Griffith, D.G. Electrophysiology testing. Tripler Army Medical Center, Honolulu, HI, 4 Apr 84.

Bode, D. Chromosteropsis. University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Bode, D. Third generation cephalosporins. Uniformed Services University of Health Sciences, Bethesda, MD, 26 May 84.

Davitt, W. Office photography made easy. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Milne, H.L. The eyelid and intraocular pressure. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Cheung, D.S. Orbital abscesses - case report and review. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Cheung, D.S. Ocular surgery. 91Y Students, Academy of Health Sciences, Fort Sam Houston, TX, 18 Apr 84.

O'Hara, M.A. New antibiotics to treat endophthalmitis. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Lloyd, W.C. ICEE vs ECCE - is either superior? Alamo City Opthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Board, R. The superior oblique - surgical considerations. Alamo City Opthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Board, R. Surgical decisions in strabismus. University of Texas Health Science Center, San Antonio, TX, 29 Jun 84.

Board, R. Adjustable sutures of strabismus. University of Texas Health Science Center, San Antonio, TX, 4 May 84.

Coronado, T. Retinal detachment experience at BAMC. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Gagliano, D. Recurrent papilloma of the lacrimal sac - case report and review. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Prestowitz, W. Microbiological assessment of the anterior chamber during cataract extraction. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Cook, M.H. Feasibility of an in-office night vision tester. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Liu, S.J. Treatment of anterior segment melanomas, iris and ciliary body melanomas. Alamo City Ophthalmology Residents Conference, University of Texas Health Science Center, San Antonio, TX, 6 Apr 84.

Orthopaedic Service

Milnor, W.H. Modified flexor tendon dynamic rehabilitation orthosis. Great Southern Occupational Therapy Conference, 13-15 Oct 83.

Bucknell, A.L. Adolescent spondylolisthesis. Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

Bucknell, A.L. MEDDAC orthopaedics. Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 83.

Santos, M.A. Prophylactic treatment of metastatic disease of the femur. Society of Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

Santos, M.A. Ankle-foot orthosis in the postoperative management of ankle fractures. Society of Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

Rice, J.E. Reflex sympathetic dystrophy of the knee. Society of Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

Kouba, S.H. Complication of adult clavicle fractures. Society of Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

Carlos, F. J. External fixation of pelvic fractures utilizing the Kronner compression frame. Society of Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

Nash, W.C. Acute anterolateral rotatory instability of the knee. Society of Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

McMillin, J.N. Percutaneous pin fixation of distal radius fractures. Society of Military Orthopaedic Surgeons Annual Meeting, Colorado Springs, CO, 13-17 Nov 83.

Milnor, W.H. Flexor tendon repair and rehabilitation in the hand, using a modified orthosis to assure full interphalangeal joint motion and tendon excursion. Texas Medical Association Annual Meeting, 10-12 May 84.

Markey, K.L. Anterior cruciate replacement with carbon fiber - a preliminary report. Texas Medical Association Annual Meeting, 10-12 May 84.

Markey, K.L. Orthotic prevention of brachial plexus injury in football. Exhibit at Texas Medical Association Annual Meeting, 10-12 May 84.

Markey, K.L. Carbon fiber replacement of anterior cruciate - a preliminary report. Texas Medical Association , Fort Worth, TX, 10-12 May 84.

Nash, W.C. Acute anterolateral rotary instability of the knee - a two year followup on surgical repair. 17th Annual American Orthopaedic Association Residents Conference, 23-25 May 84.

Markey, K.L. Football's upper trunk plexopathy. American Orthopaedic Society for Sports Medicine Meeting, Anaheim, CA, 23-26 Jul 84.

Otolaryngology Service

Sawyer, R. A practical approach to upper esophageal strictures. American Academy of Otolaryngology--Head and Neck Surgery, Anaheim, CA, 25 Oct 83.

Wittich, D.J. Cervical epidural anesthesia for head and neck surgery. Poster Presentation at the American Academy of Otolaryngology--Head and Neck Surgery, Anaheim, CA, 27 Oct 83.

Jarchow, R.C. Malar complex fractures. Fourth Maxillofacial Trauma Workshop, University of Texas Health Science Center, San Antonio, TX, 4 Nov 83.

LePore, M.L. Central mucoepidermoid carcinoma of mandible: difficulties in diagnosis and treatment. Annual Meeting of Academy of Otolaryngoloby--Head and Neck Surgery, Las Vegas, NV, Sep 84.

Jarchow, R.C. Surgical principles and techniques in blepharoplasty and face. American Academy of Otolaryngology--Head and Neck Surgery, Las Vegas, NV, Sep 84.

Peripheral Vascular Surgery

Jarstfer, B.S. Iatrogenic vascular injuries. 11th Peripheral Vascular Surgery Seminar, USUHS, Bethesda, MD, 2 Dec 83.

Delgado, R.J. OPG/spectral analysis: a carotid study. 11th Peripheral Vascular Surgery Seminar, USUHS, Bethesda, MD, 2 Dec 83.

Jarstfer, B.S. Management of carotid restenosis. University of Texas Health Science Center, San Antonio, TX, 83.

Delgado, R.J. Oculopneumoplethysmography. San Antonio Vascular Symposium, San Antonio, TX, 2 Mar 84.

Jarstfer, B.S. Arterial injuries in patients less than two years of age. San Antonio Vascular Symposium, San Antonio, TX, 2 Mar 84.

Urology Service

Ernst, J.J. Symptoms of disorders of GU tract. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 4 Oct 83.

Norbeck, J.C. Urinary tract infection. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 12 Oct 83.

Mueller, E.J. Outlet obstruction. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 13 Oct 83.

Spence, C.R. Neoplastic diseases. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 17 Oct 83.

Ernst, J.J. Calculus disease. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 17 Oct 83.

Thompson, I.M. Diagnostic and operative urology - transurethral. OR Nursing Course, Fort Sam Houston, TX, 17 Oct 83.

Spence, C.R. GU trauma. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 21 Oct 83.

Thompson, I.M. GU anomalies. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 24 Oct 83.

Mueller, E.J. Operative urology - upper and lower tract. OR Nursing Course, Fort Sam Houston, TX, 24 Oct 83.

Teague, J.L. Hypermagnesemia associated with hemiacidrin irrigation. 31st Annual Kimbrough Urological Seminar, San Francisco, CA, 6-12 Nov 83.

Thompson, I.M. Bladder surface mucin: impact on implantation of transitional cell carcinoma of the bladdr. 31st Annual Kimbrough Urological Seminar, San Francisco, CA, 6-12 Nov 83. Second prize in the Resident Competition. (C)

Thompson, I.M. Adenocarcinoma of the prostate: results of urologic screening. 31st Annual Kimbrough Urological Seminar, San Francisco, CA, 6-12 Nov 83. Bristol Laboratories Award for best Oncology paper. (C)

Bryant, K.R. Coagulum pyelolithotomy using cryoprecipitate with and without thrombin: a comparative study. 31st Annual Kimbrough Urological Seminar, San Francisco, CA, 6-12 Nov 83. Honorable mention in Resident Competition. (C)

Norbeck, J.C. Visual internal urethrotomy. 31st Annual Kimbrough Urological Seminar, San Francisco, CA, 6-12 Nov 83.

Ernst, J.J. The effect of indomethicin on postobstructive diuresis. 31st Annual Kimbrough Urological Seminar, San Francisco, CA, 6-12 Nov 83. (C)

Spence, C.R. Cut-to-light - a dim view? 31st Annual Kimbrough Urological Seminar, San Francisco, CA, 6-12 Nov 83.

Norbeck, J.C. Neurogenic bladder. Physical Therapy Students, Academy of Health Sciences, Fort Sam Houston, TX, 12 Nov 83.

Spence, C.R. Reflux. Satellite TV, U.S. Army Health Services Command, Fort Sam Houston, TX, 9 Jan 84.

Thompson, I.M. Adenocarcinoma of the prostate: results of urologic screening. American College of Surgeons, Austin, TX, 26-29 Jan 84. (C)

Urology Staff. Prsentations of interesting cases. Pyelogram Conference, Wilford Hall US Air Force Medical Center, San Antonio, TX, 2 Feb 84.

Ernst, J.J. Symptoms of disorders of the GU tract. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 24 Feb 84.

Mueller, E.J. Outlet obstruction. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 24 Feb 84.

Bryant, K.R. Scrotal emergencies. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 5 Mar 84.

Thompson, I.M. Clinical urology, diagnosis, operative urology, transurethral. OR Nursing Course, Fort Sam Houston, TX, 12 Mar 84.

Rounder, J.B. Urinary tract infection. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 13 Mar 84.

Rounder, J.B. Operative urology, upper and lower tract. OR Nursing Course, Fort Sam Houston, TX, 19 Mar 84.

Thompson, I.M. GU anomalies. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 20 Mar 84.

Spence, C.R. GU trauma. 91K Urology Technician Course, Academy of Health, Fort Sam Houston, TX, 22 Mar 84.

Thompson, I.M. Surgery of stone disease. Renal Grand Rounds. University of Texas Health Science Center, San Antonio, TX, 13 Apr 84.

Bryant, K.R. The adrenal. TV Satellite Presentation, U.S. Army Health Services Command, Fort Sam Houston, TX, 16 Apr 84.

Bryant, K.R. Coagulum pyelolithotomy using crypoprecipitate with and without the use of thrombin. 22nd Annual Meeting of the Society of University Urology Residents, New Orleans, LA, 2-5 May 84. (C)

Ernst, J.J. The preservation of cellular architecture in ischemic rate kidneys by verapamil. 22nd Annual Meeting of the Society of University Urology Residents, New Orleans, LA, 2-5 May 84. (C)

Sepulveda, R.A. Penetrating experimental renal trauma. American Urological Association 79th Annual Meeting in New Orleans, LA, 8 May 84.

Teague, J.L. Clinical urology diagnostic; operative urology transurethral. OR Nursing Course, Fort Sam Houston, TX, 16 Jul 84.

Thompson, I.M. Operative urology upper and lower tract. OR Nursing Course, Fort Sam Houston, TX, 23 Jul 84.

Rounder, J.B. Renovascular hypertension: an overview. TV Satellite, U.S. Army Health Services Command, Fort Sam Houston, TX, 13 Aug 84.

Teague, J.L. Symptoms of disorders of the GU tract. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 17 Aug 84.

Rounder, J.B. Urinary tract infections. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 20 Aug 84.

Corrie, D. Scrotal emergencies. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 24 Aug 84.

Norbeck, J.C. Outlet obstruction. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 27 Aug 84.

Spence, C.R. GU trauma. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 29 Aug 84.

Teague, J.L. Renal calculus disease. 91K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 31 Aug 84.

Thompson, I.M. GU anomalies. 92K Urology Technician Course, Academy of Health Sciences, Fort Sam Houston, TX, 7 Sep 84.

Medical Physics Service

Cherry, R.N. Reducing ionizing radiation exposure to Cardiology personnel. Health Physics Society Meeting, New Orleans, LA, 4-7 Jun 84.

Kennedy, B. The relationship between source offset in a Fletcher-Suit colpostate and rectal dose rate estimates. Health Physics Society Meeting, New Orleans, LA, 4-7 Jun 84.

Kennedy, B. Professional response to underdosage from a telecobalt unit. Health Physics Society Meeting, New Orleans, LA, 4-7 Jun 84.

Nutrition Care Division

Turcotte, J. Course presentation to the National Institute for Food Service Industry, Oct 83.

Arnold, K.V. Prenatal nutrition. Future Homemakers of America, 20 Oct 83.

Cline, A.D. Nutrition and feeding the young children. Army Community Service's Course for Babysitters, 22 Oct 83.

Arnold, K.V. Nutrition for the ostomy patient. Ostomy Society of San Antonio, 31 Oct 83.

Burchett, J.E. Diabetes. Kerrville Diabetic Association, Kerrville, TX, Nov 83.

Touchard, M.J. Nutrition information booth. Cole Elementary School Walk-a-Thon, Fort Sam Houston, TX, Nov 83.

Gooden, R. Balanced nutrition. Harlandale High School, San Antonio, TX, 9 Dec 83.

Davis, C. Basic four good groups. Fort Sam Houston Elementary School, Fort Sam Houston, TX, 12 Jan 84.

Reed, J. Seven guidelines of nutrition. Fort Sam Houston NCO Wives Club, Fort Sam Houston, TX, 17 Jan 84.

Boone, R.N. Good nutrition. 5th Graders at Castle Hill Elementary School, San Antonio, TX, 19 Jan 84.

Arnold, K.V. Nutrition and exercise. Texas Wanderers, San Antonio, TX, 31 Jan 84.

Davis, C. RDA and vitamins. U.S. Modern Pentathletes, Fort Sam Houston, TX, 21 Feb 84.

Martinez, J. Nutriton and athletes. U.S. Modern Pentathletes, Fort Sam Houston, TX, 21 Feb 84.

Gooden, R. Oral nutrition. Fort Sam Houston Elementary School, Fort Sam Houston, TX, Feb 84.

Trucotte, J. Basic nutrition. House of Neighborly Services, San Antonio, TX, 8 Mar 84.

Grediagin, A. Class presentation to TOPS, San Antonio, TX, 20 Mar 84.

Gooden, R. Good nutrition. United Methodist Church, San Antonio, TX, Mar 84.

Touchard, M.J. Dietetics. Career Day, St. Peter's School, San Antonio, TX, 11 May 84.

Arnold, K.V. Total prenteral nutrition. 91C Class, Academy of Health Sciences, Fort Sam Houston, TX, 16 May 84.

Arnold, K.V. Nutrition guidelines for cancer patients. "I Can Cope" Session sponsored by American Cancer Society, San Antonio, TX, 6 Jun 84.

Maginot, J.F. The businessman's nutritional requirements. National Nurseryman's Association Conference, San Antonio, TX, 15 Jul 84.

Maginot, J.F. Prudent diet. National Nurseryman's Association Conference, San Antonio, TX, 15 Jul 84.

Maginot, J.F. Seven guidelines to good nutrition. National Nurseryman's Association Conference, San Antonio, TX, 15 Jul 84.

Gallo, J.M. Wise dieting and fad diets. TOPS members at the Lorena Baptist Church, San Antonio, TX, 27 Aug 84.

Turcotte, J., et al. *Topics on* "food service sanitation, training, regulations, and personal hygiene." National Institute of Foodservice Industry classes sponsored by Preventive Medicine Service, Brooke Army Medical Center, Fort Sam Houston, TX, Sep 84.

Social Work Service

Eads, J.R. Thought order and disorder. Violence as a Family and Societal Problem Conference, San Antonio, TX, 9 Nov 83.

Eads, J.R. Thought order and disorder. National Association of Social Work, Texas Chapter, San Antonio, TX, 22 Feb 84.

Detail Summary Sheet

Date: 19 Oct 84	Proj No: C-5-79	Status: Ongoing

Title: Assessment of Opsonic Capacity and Phagocyte Functionality in Microliter Quantities of Whole Blood.

Start Date 4 Jan 79	Est Comp Date:
Principal Investigator Robert C. Allen, M.D., Ph.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators: Thomas J. Murphy, SP4 Michael Mead, SP4 Michael Peek, DAC
Key Words: Chemiluminigenic probes Complement	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review n/a Results

Objective(s): To research and develop a rapid, objective, and quantitative approach to the assessment of phagocyte activity in microliter quantities of whole blood by introduction of high quantum yield oxidizable substrate and use of photomultiplication techniques to quantitate chemiluminescence.

Technical Approach: Phagocytosis by granulocytes and monocytes results in activation of redox metabolism and generation of oxygenating agents as required for effective microbicidal action. Available techniques for quantifying phagocyte function are technically complex and time consuming. The technical advantages obtained using the chemiluminigenic probe (CLP) approach for measurement of phagocyte oxygenation activity has been developed in this regard. CLP's are substrates whose oxygenation results in a high yield of excited products that relax by photon emission, i.e. chemiluminescence (CL). CLP's with different physical and chemical properties allow differential quantification of phagocyte oxidase and peroxidase activities.

The CLP approach to measurement of phagocyte function can also be extended to the analysis of microbe-specific or antigen-specific opsonification kinetics. When the quantity of phagocytes, antigen, and CLP are not rate limiting, the CL velocity can be related to the opsonin content of the specimen tested.

Progress: A laboratory technique for functional analysis of complement has been developed and is currently being tested. The methodology is based on complement-dependent opsonification of microbes resulting in stimulation of granulocyte oxygenation activity as measured by chemiluminigenic probing. As expected, the kinetic order of complement activation is complex compared to the relative first order nature of IgG-dependent opsonification.

C-5-79 (continued)

Research has also progressed with regard to the direct estimation of phagocyte oxidase and peroxidase function using highly diluted whole blood specimens. The relative contribution of oxidase and peroxidase activities to the CL response has been delineated through use of the inhibitors azide and superoxide dismutase.

Detail Summary Sheet

Date: 24 Oct 84 Proj No: C-4-81 Status: Ongoing

Title: Chemiluminescence (CL) in Populations of Immunocompetent Cells.

Start Date 4 Feb 81	Est Comp Date:
Principal Investigator David G. Burleson, Ph.D., MAJ, MSC	Facility Institute of Surgical Research
Dept/Svc Biochemistry Section	Associate Investigators: Robert C. Allen, M.D., Ph.D., MAJ, MC Karen M. Wolcott, DAC
Key Words: Chemiluminescence Immunocompetent cells	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 386.78

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): 1) To quantitate the oxidative metabolic response of stimulated populations of immunocompetent cells isolated from mouse or guinea pig spleen, thymus, liver, and lymph nodes using chemiluminigenic probes.

2) To quantitate and characterize the chemiluminescent response from various populations of immunocompetent cells in the presence of cyanide, superoxide dismutase, and catalase.

Technical Approach: Peritoneal cells from guinea pigs injected IP with sodium caseinate are harvested at 7 days. Macrophages (MP) and granulocytes (GL) are separated after centrifugation on Percoll density gradients. The purified cells are incubated with various chemical, lectin, and phagocytic stimulants and several metabolic inhibitors and scavenger enzymes. The resulting activity is measured by a chemiluminigenic probe technique. Luminol and DBA are used as probes and the chemiluminescence that results from the oxygenation of the probes is measured in single photon counters. Cell oxygenation activity is also measured by flow cytometry using dichlorofluoroscein diacetate as an internal probe.

Progress: The ability of cells with buoyant density intermediate between MP and GL to inhibit the activity of the two phagocytes is being investigated. The amount of inhibition measured is correlated to both the length of time the inhibitor cells are incubated with the MP or GL and the concentration of inhibiting cells relative to the concentration of MP or GL. Further studies into the nature of the inhibition are ongoing.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-13-81 Status: Ongoing

Title: Therapeutic Manipulation of Metabolic Endocrine Controls During Infection.

Start Date 11 Mar 81	Est Comp Date:
Principal Investigator James H. Anderson, Jr., M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators: Gerald A. Merrill, DAC
Key Words: Metabolic endocrine controls	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): To clearly define the mechanisms of hormonal action and metabolic alterations in infectious disease and thus establish the best therapeutic and supportive care for personnel exposed to infectious agents.

Technical Approach: Animals with a variety of induced infections will be studied for glucose tolerance and insulin secretion, binding and effects as well as specific biochemical and physiological function of the islets of Langerhans and cellular insulin receptors on monocytes, hepatocytes, and adipocytes. In addition, lipid and protein breakdown and emtabolism will also be evaluated.

Progress: Continuation of this study at BAMC awaits renovation/completion of the laboratory animal facility.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-14-81 Status: Completed

Title: Investigation of the Involvement of Endogenous Opiates in the Development of the Metabolic Pathophysiology of Infection and Endotoxin Shock.

Start Date Reopened 5 Mar 84	Est Comp Date:
Principal Investigator James H. Anderson, Jr., M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators: Gerald A. Merrill, DAC
Key Words: Endotoxin shock	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 17,993.74

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): To determine the influence of stress released endogenous opiates on hormonal release by the endocrine pancreas as a result of infection or endotoxin shock.

Technical Approach: Dogs were divided into five experimental groups (glucose alone; endotoxin LD_{70} alone; glucose and endotoxin; glucose, endotoxin, and naloxone; or glucose and naloxone), anesthetized and catheters implanted into femoral and jugular veins. Infusions appropriate for the experimental group were started after four baseline blood samples had been obtained. Periodic blood samples were drawn over the following six hours. Blood samples were processed such that glucose, insulin, methionine enkephalin, leucine enkephalin, and beta endorphin concentrations could be determined. Analysis of results were used to evaluate the effect of naloxone (opiate receptor antagonist) on glucose stimulated endotoxin induced hyperinsulinism and to indicate the plasma concentrations of the endogenous opiates secreted in response to endotoxin shock.

Progress: Previously obtained data indicated that endogenous opiates are involved in the development of glucose-stimulated endotoxin-induced hyperinsulinism. However, due to animal deaths which occurred prior to conclusion of the study period (7 hours) several groups had less than acceptable numbers of animals to permit statistical analysis. Seven additional animals have been incorporated into the study. Biochemical analysis to determine the plasma concentrations of the various parameters is presently in progress. Analysis thus far indicates the same trends are being observed as previously reported.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-28-81 Status: Terminated

Title: In vitro Synthesis of Immunoglobulins and Suppressor Cell Activity in patients with Solid Tumors and Lymphomas on and off Therapy.

Start Date 1 Apr 81	Est Comp Date:
Principal Investigator David G. Burleson, Ph.D., MAJ, MSC	Facility Brooke Army Medical Center
Dept/Svc ISR/Biochemistry	Associate Investigators: James F. Boyd, M.D., LTC, MC
Key Words: Immunoglobulins Suppressor cell activity	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 10 May 84 Results Revise and Resubmit

Objective(s): 1) To evaluate the in vitro synthesis of immunoglobulins in patients with different types of tumors.

2) To determine whether suppressor T-cell activity is increased in patients with lymphoma as compared with solid tumor patients.

3) To assess the effect of chemotherapy on immunoglobulin synthesis and suppressor cell activity in both groups of patients.

Technical Approach: New technology currently available requires that this protocol be revised and resubmitted for approval of a new approach.

Progress: At the time of periodic review, it was noted recommended that the protocol be revised and resubmitted if the principal investigator wished to continue the study.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-16-82 Status: Oning

Title: Biosynthetic Human Insulin in Treatment of Diabetes.

Start Date 20 Jan 82	Est Comp Date:
Principal Investigator James H. Anderson, Jr., M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators:
Key Words: Diabetes Human insulin	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 2

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To evaluate the efficacy and safety of biosynthetic human insulin (BHI) in the treatment of insulin-dependent diabetes, and to detect, if present, immunologic evidence of E. coli proteins in patients who have received BHI.

Technical Approach: Newly diagnosed insulin-dependent diabetics are begun on biosynthetic human insulin using only regular insulin delivered by means of a continuous subcutaneous insulin infusion pump. This is a cooperative study with the Eli Lilly Company.

Progress: Two patients have been entered on the study. Both are doing well with no complications from the insulin or the pump. No adverse effects have been detected.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-40-83 Status: Ongoing

Title: Viral Infection and Diabetic Disease in Laboratory Animals.

Start Date 6 May 83	Est Comp Date:
Principal Investigator (vice Pedersen) James H. Anderson, Jr., M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators:
Key Words: Diabetic disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To determine whether VEE virus subtypes localize and replicate in pancreatic tissue, as well as the degree of virus induced pancreopathy, the proposed experiments will determine whether attenuated VEE viruses do indeed replicate the pancreas and to what degree; and whether focal pancreatic lesions are indeed virus-induced or the consequences of other events.

Technical Approach: This study has not begun.

Progress: None. Adequate facilities for conducting this study are not available at this time.

Detail Summary Sheet

Date: 5 Nov 84 Proj No: C-41-83 Status: Ongoing

Title: Rheumatoid Synovial Dendritic Clel - Its Possible Origin and Regulation of Collagenase Production.

Start Date 7 Jun 83	Est Comp Date:
Principal Investigator Debra J. Krikorian, CPT, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators:
Key Words: Rheumatoid Arthritis Collagenase	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To determine the production of collagenase by the rheumatoid dendritic cell utilizing collagenase assay.

Technical Approach: Rheumatoid dendritic cell cultures were maintained with and without fetal calf serum in a supplemented media. Cultures were fed every three days and the media removed and frozen at 20°C. Samples were collected and pooled by patient number with and without fetal calf serum. These samples were semipurified and assayed for the presence of collagenase.

Progress: The cell culture phase has been completed. Approximately 80 samples are being assayed for the presence of collagenase. When this assay is completed, the project will be finished.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-45-83 Status: Ongoing

Title: Development of a Chemiluminescent Enzyme Linked Immunoassay (CELIA) System for Detection of Antigens of Medical Importance in Serum and Tissue Fluids.

Start Date 17 May 83	Est Comp Date:
Principal Investigator Gerald A. Merrill, DAC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators: Robert C. Allen, M.D., Ph.D., MAJ, MC
Key Words: Antibody system	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 7,730.61

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To develop an enzyme-linked antibody system for antigen-specific detection of fungi, bacteria, viral agents, hormones, and immune complexes.

Technical Approach: This study was designed to be conducted in three phases: 1) isolation of haloperoxidases, 2) kinetic analysis of enzymes, and 3) assay development. Haloperoxidase isolation from granulocytes by several techniques was to be examined. The study of the microbicidal function of animal granulocytes in relation to the haloperoxidase activity of these cells is a secondary objective of this study. Isolated enzymes will be used for analysis of substate dependence to determine optimal enzyme conditions for both halogenation activity and chemiluminescent activity. Investigation of inhibitors of the haloperoxidases will permit selection of suitable methods of collection of biological samples which may ultimately be assayed by this immunoassay system. Once optimal conditions have been determined, the enzymes can be covalent bound to antibodies of choice, and correlations between chemiluminescence and antigen concentration can be determined.

Progress: Myeloperoxidase (MPO) and eosinophilic peroxidase (EPO) have been isolated from human granulocytes from whole blood therapeutic leukapheresis units and spleen. MPO has been purified to a degree reported to be theoretical puritiy and EPO has been purified to a degree exceeding all previously reported values by a modified HPLC technique, achieving a marked increase in the yield of active enzyme over previous isolation techniques. Kinetic analysis of each enzyme has been started. Preliminary studies indicate that the conditions optimizing the halogenating activity of both enzymes does not correlate with the

C-45-83 (continued)

conditions which optimize the chemiluminescent activity. Animal studies have indicated that goats do not provide a reasonable source for obtaining large quantities of haloperoxidases. Data obtained from roosters indicate that MPO deficiency is strain related. Granulocytes from strains lacking MPO have been shown to have chemiluminescent activity which suggests a microbicidal mechanism dependent on superoxide radical formation.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-72-83 Status: Ongoing

Title: An Investigation into Biotyping of Staphylococcus epidermidis Sensu Stricto and Correlation of Biotype with Virulence and Human Disease.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Bruce A. Gunn, Ph.D., MAJ, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators: William Nauscheutz, M.S., CPT, MSC Geri Davis, SP4
Key Words: Staphylococcus epidermidis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 4,130.32

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): 1) Clinical strains of S. epidermidis will be tested for presence of selected morphologic and physiologic characters.

2) Phenotype profiles will be used to sort strains of S. epidermidis into biotypes.

3) Biotypes will be correlated with: 1) significance in human disease; 2) resistance to antibiotics; 3) predilection for a certain body site; 4) possession of virulence factors; and 5) virulence, as measured by growth rate, delta toxin, tissue culture, and mouse virulence assays.

Technical Approach: Strains of S. epidermidis sensu stricto cultured from blood, urine, wounds, and fluids will be assessed as to their significance in human disease.

Ten or more organisms from each of nine category types will be selected and identified using a commercially available identifcation kit. The first ten strains from each category identified as S. epidermis sensu stricto will be studied. Strains identified as one of the other eight recognized coagulase-negative species will be stored on agar slant media for later use. Thus 90 strains of S. epidermis will be selected for study.

Progress: Objectives 1 and 2 have been accomplished and the data are being analyzed. Objective 3 is ongoing.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-73-83 Status: Ongoing

Title: The Effect of Lysine on Herpex Simplex Virus (HSV) Infection.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Eleanor Ayala, MT, DAC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators:
Key Words: Herpes simplex virus L-lysine	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 1,527.36

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review n/a Results _____

Objective(s): To evaluate the in vitro effect of L-lysine on HSV infected cells and the in vivo effect of topical applications of L-lysine in treatment of HSV skin infecitons in laboratory animals.

Technical Approach: In vitro studies of the effects of L-lysine on HSV-1 infections will be done using primary cultures of mouse dorsal root ganglion (MDRG) and other cell lines. Cells will be examined by light and electron microscopy (EM) and by direct immunofluorescence technique.

In vivo studies of effects of L-lysine on cutaneous HSV-1 infections of guinea pigs include dose response, optimum number and time of treatment for healing. Inoculated sites will be scored for apperance, erythema, number of blisters, crusting, etc., and by EM examination of biopsies of infected areas and DRGs innervating the infected areas.

Progress: In vitro studies of HSV-1 (KOS) inoculated MDRG in culture and certain other cell lines demonstrated no cytopathological effects (CPE) with medium containing added L-lysine. In vivo studies have shown accelerated healing with topical applications of lysine. Electron microscopy results on biopsies and DRGs are forthcoming.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-62-84 Status: Ongoing

Title: Diabetes Management and Personal Interests.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator James H. Anderson, Jr., M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators: Wm. H. Havin, Graduate Student, Texas Tech University
Key Words: Diabetes management	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To determine how the kinds of things people like to do affect the way they manage their diabetes.

Technical Approach: Patients seen in the Diabetic Clinic are asked to complete a questionnaire to determine how the things people like to do affect the way they manage their diabetes. In addition, the results of three most recent glycosylated hemoglobin will be furnished the investigator at Texas Tech University.

Information obtained from the five participating institutions will be correlated and statistical analysis carried out.

Progress: Data are being accumulated for evaluation.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-81-84 Status: Onging

Title: Production of Monoclonal Antibodies to Synovial Fluid Cells Obtained from Patients with Rheumatoid Arthritis.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator Eleanor Ayala, DAC	Facility Brooke Army Medical Center
Dept/Svc Department of Clinical Investigation	Associate Investigators: Robert Brewer, M.D., MAJ, MC Clark Tchernowitz, SP5 Debra J. Krikorian, CPT, MSC
Key Words: Monoclonal antibodies	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To use monoclonal antibodies for the differentiation and analysis of cell types in synovial fluid from rheumatoid arthritis patients.

Technical Approach: Synovial fluid specimens obtained from selected patients will be centrifuged in order to separate the cells according to size and buoyant density. Cells will be analyzed for hyaluronidase production rection to MCF and collagenase production. Those cell populations given positive tests will be selected and their membrane preparations utilized for in vivo and in vitro immunization of spleen cells. Monoclonal antibody production will be as outlined in the protocol.

Progress: This is a new study.

Detail Summary Sheet

Date: 9 Feb 84 Proj No: C-62-81 Status: Completed

Title: Effect of Supplemental Oxygen on the $PtcO_2$ of Patients Undergoing Outpatient Oral Surgery.

Start Date 23 Sep 81	Est Comp Date:
Principal Investigator Richard A. Kraut, D.D.S., COL, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators:
Key Words: Supplemental oxygen	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 60

Total Number of Subjects Enrolled to Date: 60

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To determine the changes from baseline PO_2 in patients undergoing outpatient oral surgery with supplemental nasal oxygen utilizing local anesthesia or local anesthesia plus intravenous valium and sublimaze.

Technical Approach: Patients were assigned to one of four study groups based on their preference for conscious sedation or local sedation. Those requesting local anesthesia were alternately placed in Group A or B, and those requesting conscious sedation were alternately placed in Group C or D. Group A and B consisted of ten patients each, while Group C and D consisted of twenty patients each. Group A and C received supplemental oxygen via nasal cannula, and those in Group B and D received supplemental oxygen via nasal mask. $PtcO_2$ was recorded for four minutes following the termination of supplemental oxygen.

Progress: There was clearly an increase in the $PtcO_2$ in all patients. Those who were given supplemental oxygen via nasal cannulae, showed an increase in $PtcO_2$ of 69 mm Hg over baseline in the nonsedated group and 53 mm Hg in the sedated group. Those patients who received supplemental oxygen via nasal mask had a much more pronounced increase in their $PtcO_2$, 177 mm Hg for the unsedated group and 162 mm Hg for the sedated group. It is important to note that both the sedated groups demonstrated less increase in $PtcO_2$ compared to the nonsedated group. This difference in $PtcO_2$ is especially significant in view of the fact that diazepam and fentanyl were intentionally kept at low levels.

Detail Summary Sheet

Date: 21 May 84 Proj No: C-54-82 Status: Completed

Title: Evaluation of O_2 and CO_2 Monitoring During Conscious Sedation for Oral Surgery.

Start Date 13 Aug 82	Est Comp Date:
Principal Investigator Richard A. Kraut, D.D.S., COL, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators:
Key Words: Oral surgery	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 50

Total Number of Subjects Enrolled to Date: 50

Date of Periodic Review 11 May 84 Results Completed

Objective(s): 1) To determine the change from baseline $PtcO_2$ in patients undergoing outpatient oral surgery utilizing local anesthesia, intravenous diazepam, fentanyl, and methohexital.

2) To determine the effect of 6 liters/minute O_2 on the $PtcO_2$ of patients undergoing outpatient oral surgery utilizing local anesthesia and intravenous diazepam, fentanyl, and methohexital.

Technical Approach: Fifty ASA I adult patients who presented to the Oral and Maxillofacial Surgery Service for removal of third molars constituted the study group. A table of random numbers was utilized to assign patients to either receive supplemental oxygen, or to breathe room air during their sedation and surgery.

Transcutaneous oxygen and carbon dioxide sensors of a Roche Model 5302 Oxygen Monitor and a Roche Model 364 Carbon Dioxide Monitor were applied.

In those patients who were to receive supplemental oxygen, a nasal mask attached to a Porter MXR Flow Meter set to provide a 6 liter/minute flow rate was applied. Throughout the surgical procedure, those with supplemental oxygen were encouraged to breathe through their nose, and all patients were reminded to breathe deeply. All of the patients remained conscious.

Progress: Continuous transcutaneous oxygen and carbon dioxide monitoring during conscious sedation utilizing diazepam, fentanyl, and methohexital, indicates that hypoxia occurs in all patients maintained on room air; 36% of the patients maintained on room air showed a decrease in transcutaneous oxygen of greater than 20 mm Hg. Although the use of supplemental O_2 prevented hypoxia, the combination of diazepam, fentanyl and methohexital depressed all of the patients'

C-54-82 (continued)

carbon dioxide chemoreceptors, resulting in a statistically similar rise in transcutaneous carbon dioxide in the oxygen supplemented patients, as well as in the patients who were mtaintained on room air. The need for supplemental oxygen in patients sedated with diazepam, fentanyl and methohexital is clearly established.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-65-82 Status: Ongoing

Title: Electrocardiographic Changes During Outpatient Oral Surgery.

Start Date 24 Sep 82	Est Comp Date:
Principal Investigator Richard A. Kraut, D.D.S., COL, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators:
Key Words: Oral Surgery	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 45

Total Number of Subjects Enrolled to Date: 92

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To determine the type and frequency of dysrhythmias that occur during outpatient oral surgery.

Technical Approach: All ambulatory patients over the age of 18 treated by the clinical investigator are being monitored with lead 2 electrocardiogram. A computerized ECG monitor is being utilized to detect changes from the starting cardiac rhythm of the patient.

Progress: Ninety-two patients have been enrolled to date with no adverse effect on any of the patients due to the monitoring nor have any of the patients experienced any significant complication during their surgery.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-25-83 Status: Ongoing

Title: Determination of $PtcO_2$ During the Perioperative Period of Patients Undergoing Orthognathic Surgery.

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator Richard A. Kraut, D.D.S., COL, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators:
Key Words: Orthognathic surgery	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 15

Total Number of Subjects Enrolled to Date: 15

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To dtermine the baseline $PtcO_2$ of each patients studied; to determine the $PtcO_2$ of patients who have just undergone orthognathic surgery and who are still intubated; to determine the $PtcO_2$ when patients are extubated following orthognathic surgery; to determine the $PtcO_2$ in patients 48 hours after orthognathic surgery.

Technical Approach: Transcutaneous oxygen monitor is being utilized to monitor patients preoperatively, immediately postoperatively and in their postoperative convalescent period to determine if there is any alteration in transcutaneous PO_2 secondary to being in intermaxillary fixation.

Progress: Study is progressing well. There is no morbidity associated with the patients that have been completed to date.

Detail Summary Sheet

Date: 26 Sep 84 Proj No: C-59-83 Status: Ongoing

Title: A Comparison of the Effects of Ethrane and Forane on PO_2, PCO_2, Blood Pressure and Pulse When Used for Outpatient Oral Surgery.

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator Glenn Reside, D.D., MAJ, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators: Richard A. Kraut, D.D.S., COL, DC
Key Words: Oral surgery	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review 13 Jul 84 Results Continue

Objective(s): To compare the changes from baseline PO_2, PCO_2, blood pressure and pulse in patients undergoing outpatient general anesthesia with either Ethrane or Forane.

Technical Approach: Transcutaneous oxygen and carbon dioxide monitor as well as automatic blood pressure monitor and ECG monitor were utilized to monitor physiologic parameters associated with the use of Forane and Ethrane.

Progress: Data have been collected and are currently being analyzed for preparation of the final report on this project.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-68-83 Status: Completed

Title: Evaluation of PO_2 Changes During Surgical Removal of Wisdom Teeth Utilizing Enflurane Anesthesia.

Start Date 9 Sep 83	Est Comp Date:
Principal Investigator Richard A. Kraut, D.D.S., COL, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators: David Glendening, M.D., LTC, MC
Key Words: Wisdom teeth	Bruce Busk, M.D., CPT, MC Herman Blanton, M.D., CPT, MC
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 27

Total Number of Subjects Enrolled to Date: 27

Date of Periodic Review 12 Jul 84 Results Continue

Objective(s): 1) To determine if the two previously reported patient groups can be predicted based on preoperative pulmonary function testing.

2) To determine if the previously reported transcutaneous PO_2 values are truly reflective of the patient's PO_2 or if some patients enter a physiologic state which precludes meaningful transcutaneous oxygen monitoring during enflurane general anesthesia.

Technical Approach: Twenty seven ASA I adult patients who requested general anesthesia in association with the removal of impacted wisdom teeth constituted the study group. A complete history and physical examination including a CBC, UA, screening spirometry and single breath diffusing capacity for carbon monoxide was performed 48 hours prior to surgery. The following monitors were connected prior to the induction of anesthesia: transcutaneous oxygen monitor, transcutaneous carbon dioxide monitor, electrocardiograph, pneumotachygraph, automatic blood prsesure monitor, and precordial stethoscope. An intravenous line was established with an 28 gauge intracath utilizing 5% dextrose in lactated Ringer's solution. A .4 mg dose of atropine, 8 mg dose of dexamethasone and a 3 mg defasciculating dose of curare was administered intravenously. A full face mask was used to oxygenate the patient with 100% oxygen for 60 seconds. Induction was accomplished with 100 mgs of methohexital, relaxation with 100 mgs of succinylcholine.

A specimen was drawn for arterial blood gases immediately upon establishment of the arterial line. The digital transcutaneous oxygen and carbon dioxide monitor readings were noted at the time the arterial sample was drawn. The percentage of ethrane was continually reduced during surgery to as low a level as possible, consistent with the patient's vital signs and maintenance of favorable operating environment. When the transcutaneous oxygen level had reached a plateau, the digital transcutaneous arterial oxygen and carbon dioxide tensions were obtained

simultaneously. When the surgery was completed, the patient was placed on 100% oxygen until they were able to respond to the verbal command to open their eyes. Immediately prior to extubation, a final transcutaneous and arterial oxygen and carbon dioxide tension was obtained.

Progress: Of the 27 patients studied, 14 exhibited $PtcO_2$ changes between surgery and extubation which were less than 70 mm Hg. The mean change in $PtcO_2$ in the poor oxygen responders was 23 $\pm$ 10 mm Hg and for the high oxygen responders was 149 $\pm$ 22 mm Hg. Low PaO_2 responses (less than 100 mm Hg) were verified in eight patients by arterial blood gas samples. The PaO_2 change from surgery to extubation for the low PaO_2 responders was 1+37 mm Hg and for the high responders was 119+13 mm Hg. Both the transcutaneous and arterial blood gas data demonstrated significant differences ($P < 0.001$) in the PO_2 responses between the high and low responders. When arterial blood gas data were grouped using the transcutaneous $PtcO_2$ criteria, the differences between groups was less significant. However, a reasonable correlation between PaO_2 and $PtcO_2$ was noted during the time of surgery ($r = 0.71$, $p < 0.05$). Seven of the eight patients identified as having a poor PO_2 response via PaO_2 determination were within the group of 14 patients identified as poor PO_2 respondrs based on the transcutaneous $PtcO_2$ grouping.

Four of the eight patients whose PaO_2 failed to increase significantly at the time of extubation had arterial carbon dioxide ($PaCO_2$) levels during surgery that were greater than 50 mm Hg. Although the $PaCO_2$ of the patients who failed to show an increase of more than 100 mm Hg of O_2 were slightly higher than the patients who increased their oxygen tension by more than 100 mm Hg between surgery and extubation, the changes in $PaCO_2$ between surgery and extubation were less than 2$\pm$8 mm Hg. Therefore, hypoventilation was ruled out as a significant cause of the varied O_2 response observed in the patients studied. There was a poor ($r = 0.44$) but significant ($p < 0.05$) correlation between transcutaneous carbon dioxide ($PtcCO_2$) and $PaCO_2$ during the surgical period.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-76-83 Status: Ongoing

Title: Evaluation of Changes in $PtcO_2$ and $PtcCO_2$ in Patients with Chronic Obstructive Pulmonary Disease (COPD) While Undergoing Outpatient Oral Surgery with Intravenous Sedation and Local Anesthesia.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator George D. Suchko, D.D., MAJ, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators: Richard A. Kraut, D.D.S., COL, DC
Key Words: Chronic obstructive pulmonary disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 10

Total Number of Subjects Enrolled to Date: 10

Date of Periodic Review 13 Jul 84 Results Continue

Objective(s): 1) To determine the change of baseline $PtcO_2$ and $PtcCO_2$ in patients with chronic obstructive pulmonary disease while undergoing outpatient oral surgical procedures under intravenous sedation and local anesthesia.

2) To evaluate the effects of flow O_2 (1-2 liters) administered by nasal mask on baseline $PtcO_2/PtcCO_2$.

3) To evaluate the effects of sedation with titrated intravenous diazepam on respiratory depression in patients with COPD.

Technical Approach: Transcutaneous oxygen and carbon dioxide are being monitored on patients undergoing ambulatory oral surgery utilizing IV sedation and low flow supplemental oxygen.

Progress: Due to the stringent requirements for inclusion in this study, only 10 patients have been enrolled to date. It is anticipated that with the support of the Pulmonary Medicine Service that the remaining 10 patients can be gathered to complete this study.

Detail Summary Sheet

Date: 30 Oct 84	Proj No: C-65-84	Status: Ongoing

Title: Comparison of Sublimaze and Sufentanil Citrate in Intravenous Conscious Sedation for Outpatients Oral Surgery.

Start Date 13 Sep 84	Est Comp Date:
Principal Investigator Raymond A. Kurowski, D.D., MAJ, DC	Facility Brooke Army Medical Center
Dept/Svc Department of Dentistry/Oral Surgery	Associate Investigators: Richard A. Kraut, D.D.S., COL, DC
Key Words: Oral surgery	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): To compare the blood pressure, pulse, respiratory rate, $PtcO_2$ and $PtcCO_2$ in patients sedated with sublimaze versus sufentanil citrate for surgical removal of impacted wisdom teeth.

Technical Approach: Patients scheduled to have impacted wisdom teeth removed under local anesthesia are eligible. They will be assigned to one of two groups. Group A will receive local anesthesia plus Valium and Fentanyl. Gorup B will receive local anesthesia plus Valium and Sufentenil. Blood pressure, heart rate, breathing rate, and blood oxygen and carbon dioxide will be monitored.

Progress: This is a new study.

Detail Summary Sheet

Date: 9 Mar 84 Proj No: C-8-83 Status: Terminated

Title: The Effect of Using Isopropyl Alcohol for Venipuncture Skin Preparation on Determining Blood Alcohol Levels.

Start Date 10 Nov 82	Est Comp Date:
Principal Investigator Matthew M. Rice, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Emergency Medicine	Associate Investigators: William H. Dice, M.D., MAJ, MC
Key Words: Blood alcohol	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date: 100

Date of Periodic Review 9 Mar 84 Results Terminate

Objective(s): To study the effect of using an isopropyl alcohol skin preparation on legal blood alcohol levels.

Technical Approach: One hundred healthy male and female volunteers were randomly divided into two groups. Each group consumed two 12 ounce glasses of beer. Thirty minutes after ingestion, two simultaneous 7 cc tubes of venous blood were obtained, one from each antecubital fossa.

Sampling sites were prepared using either isopropyl alcohol or acetone antiseptic. Group I volunteers had venous blood sampled after sample site had dried at least 60 seconds after skin preparation. Group II volunteers had venous blood sampled immediately while the skin site was moist with antiseptic.

Gas chromatography and ACA dehydrogenase methods were used to determine acetone, isopropyl and ethyl alcohol concentrations.

Progress: The principal investigator has been reassigned. Therefore, the is terminated due to inability to obtain final results of study.

Detail Summary Sheet

Date: 1 Oct 84 Proj No: C-11-83 Status: Ongoing

Title: The Effect of MAST Trousers in the Prehospital Management of Penetrating Abdominal Injuries.

Start Date 6 Jan 83	Est Comp Date:
Principal Investigator William H. Bickell, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Emergency Medicine	Associate Investigators: Kenneth Mattox, M.D., Baylor College of Medicine, Houston, TX
Key Words: MAST trousers	Michael E. DeBakey, M.D.
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To define the statistical significance of MAST trouser use in the prehospital management of penetrating abdominal injuries. Parameters to be examined include: 1) survival, 2) estimated blood loss, and 3) postoperative complications.

Technical Approach: Patients entered into the study were victims of blunt or penetrating injuries found to have a systolic blood pressure (BP) of 90 mm Hg or less at the time of the initial prehospital assessment by paramedics from the City of Houston Emergency Medical Services (EMS). Gravid females and patients less than 15 years of age were excluded from the study as were patients with evisceration or impaled objects in a body region that would be encompassed by the MAST.

Sixty-eight patients were randomly assigned to study and control groups. Thirty-two control patients whose initial systolic BP was 59 $\pm$ 32 mm Hg, and thirty-six MAST-treated patients, whose initial BP was 55 $\pm$ 31 mm Hg, were found to be well-matched for age; sex; type and location of injuries; initial field TS; response, field management and transport times; and the total amount of intravenous crystalloid infused.

Progress: Our results demonstrated no significant difference between the control and MAST-treated groups in the presenting emergency center Trauma Score (TS) (9.8 $\pm$ 6.6 vs. 10.6 $\pm$ 5.9). These preliminary data challenge the widely accepted belief that MAST enhance conventional support for improving the prehospital condition of injured patients with significant hypotension.

Detail Summary Sheet

Date: 24 Oct 84 Proj No: C-23-80 Status: Terminated

Title: An Evaluation of Local Anesthetic Skin Testing and Progressive Challenge in Patients with a History of an Adverse Reaction to Local Anesthetics.

Start Date 24 Jun 80	Est Comp Date:
Principal Investigator Daniel A. Ramirez, M D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Allergy-Immunol	Associate Investigators:
Key Words: Local anesthetic skin testing	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To confirm the safety and usefulness of this approach in a larger number of patients with histories of previous suspected adverse reactions to local anesthetics.

Technical Approach: Patients with histories of adverse reactions to local anesthetics are evaluated by a skin test progressive challenge protocol.

Progress: This study was terminated. The principal investigator was not interested in continuing the study since not enough data have accumulated at other centers.

Detail Summary Sheet

Date: 24 Oct 84 Proj No: C-37-80 Status: Terminated

Title: Assessment of Granulocyte Function and Serum Opsonic Capacity in Nephrology Patients Undergoing Dialysis

Start Date 28 Jul 80	Est Comp Date:
Principal Investigator Charles S. Foulks, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: Robert C. Allen, M.D., Ph.D., MAJ, MC
Key Words: Opsonic capacity	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To assess granulocyte function in nephrology patients undergoing dialysis.

Technical Approach: Blood samples are obtained from dialysis patients immediately prior to and after being exposed to the dialysis membrane during hemodialysis. The polymorphonuclear cells have been subjected to chemiluminescent studies.

Progress: This study was terminated due to release from active duty of the former principal investigator, MAJ Lucius Wright.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-2-81 Status: Ongoing

Title: Evaluation of the Coagulation, Fibrinolytic, and Humoral Immune Abnormalities Induced by Crotalus Atrox (Western Diamondback Rattlesnake) Snakebite.

Start Date 10 Oct 82	Est Comp Date:
Principal Investigator John J. Posch, DAC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Hematology	Associate Investigators: Glenn J. Mills, M.D., MAJ, MC Barbara Reeb, DAC
Key Words: Snakebite	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 54

Date of Periodic Review _____ Results _____

Objective(s): To evaluate and characterize the coagulation, fibrinolytic and humoral immune abnormalities induced in patients envenomated by Crotalus atrox (western diamondback rattlesnake).

Technical Approach: Patients envenomated by rattlesnakes were evaluated for possible bleeding abnormalities. Coagulation profiles and fibrinolytic enzyme workups were performed on plasma specimens and pertinent hematological data compiled from admission workups. In vitro studies using crude venoms from three rattlesnake species (C. atrox, C. adamanteus, and C. hor. horridus) were performed to measure thrombin-like, fibrinolytic, and chromogenic enzyme activities of these venoms. Individual venoms were obtained from different size snakes of C. atrox in order to observe the effects of age on venom activity. Additional chromogenic substrate tests have been added to determine kalikrein-like activity. Crude pooled venoms are presently being fractionated and enzyme components will be characterized with respect to procoagulant, fibrinolytic, and chromogenic properties.

Progress: Coagulation profiles, fibrinolytic workups and hematological data have been compiled from 54 different envenomation cases. Coagulation abnormalities have been detected in some of these patients. Additional in vitro testing of crude venoms and isolations of enzyme fractions have been initiated to further characterize the thrombin-like and/or fibrinolytic enzymes present in rattlesnake venoms.

Detail Summary Sheet

Date: 12 Mar 84 Proj No: C-3-81 Status: Terminated

Title: Study of Granulocyte Function in Leukemia Patients Receiving Granulocyte Transfusions.

Start Date 10 Oct 81	Est Comp Date:
Principal Investigator Glenn M. Mills, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Hematology	Associate Investigators: Robert C. Allen, M.D., Ph.D., MAJ, MC John J. Posch, Jr., DAC Barbara Reeb, DAC
Key Words: Leukemia Granulocyte function	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 9 Mar 84 Results Terminated

Objective(s): 1) Prospective evaluation of neutrophil function (NF) and humoral immunity (HI) in patients with leukemia.

2) Evaluation of changes induced in HI and NF by either radiation therapy or chemotherapy.

3) Evaluation of kinetics of transfused neutrophils in leukemia patients.

4) Correlation of improvement in NF and HI in recipients of granulocyte transfusions and clinical course.

Technical Approach: None.

Progress: This study was terminated due to inability to perfect the assay.

Detail Summary Sheet

Date: 16 May 84 Proj No: C-5-81 Status: Terminated

Title: The Natural History of Patients with Large Local Reactions (LLR) Following a Hymenoptera Sting.

Start Date 3 Feb 81	Est Comp Date:
Principal Investigator Daniel A. Ramirez, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Allergy	Associate Investigators:
Key Words: Hymenoptera sting	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 1984 Results Terminate

Objective(s): To study the natural history of patients who have experienced LLR following an insect sting. Several aspects of this problem will be studied: (a) What is the risk of systemic anaphylaxis in this group of patients? (b) Can patients with histories of LLR and at risk of anaphylaxis be identified prospectively?

Technical Approach: It was planned that patients who met the above objectives would undergo the following: (a) Venom skin testing, (b) obtain venom specific IgE and IgG, (c) Sting challenge under controlled conditions to assess current sensitivity, and (d) Obtain specific venom IgE and IgG's following sting challenge.

Progress: After overcoming the initial difficulties with the ELISA technique for measuring antibiotics to venom, no patients volunteered for an insect sting. Furthermore, recent literature has addressed this problem and shown that large local reactions do not appear to be at risk of anaphylaxis. Because of these reasons, study has been terminated.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-12-81 Status: Completed

Title: Study of Granulocyte Function, Complement Activity, and Coagulation in Patients with the Adult Respiratory Distress Syndrome (ARDS).

Start Date 4 Feb 81	Est Comp Date:
Principal Investigator Glenn M. Mills, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Hematology	Associate Investigators: Robert C. Allen, M.D., Ph.D., MAJ, MC John J. Posch, Jr., DAC Barbara Reeb, DAC
Key Words: ARDS	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 2

Date of Periodic Review 10 May 84 Results Completed

Objective(s): 1) Evaluation of neutrophil metabolism by chemiluminescence in patients with ARDS.

2) Measurement of complement activity via the classical and alternate pathways in patients with ARDS.

3) Study of the coagulation and fibrinolytic systems in patients with ARDS.

4) Correlation of steroid therapy with the above objectives in patients with ARDS.

Technical Approach: Original principal investigator is now in Germany. However, prior to his departure he completed documentation that hepabsorb does not alter coagulation parameters.

Progress: Unfortunately, the number of patients with ARDS was too low to make any meaningful conclusions. However, this study did show the under diagnosis of disseminated intravascular coagulation by BAMC housestaff.

Detail Summary Sheet

Date: 16 May 84 Proj No: C-31-81 Status: Terminated

Title: Profile of Aortic Impedance in Patients with Congestive Cardiomyopathy.

Start Date 15 Mar 81	Est Comp Date:
Principal Investigator Joseph P. Murgo, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Bernard J. Rubal, Ph.D. N. Westerhoff, Ph.D.
Key Words: Aortic impedance Congestive cardiomyopathy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 1984 Results Terminated

Objective(s): To evaluate the role of afterload reduction and exercise on the aortic impedance profile of patients with congestive cardiomyopathy.

Technical Approach: None.

Progress: Study was terminated because of computer equipment failure which was required for waveform analysis.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-33-81 Status: Ongoing

Title: Renal Function in Primary Hyperparathyroidism.

Start Date 12 May 81	Est Comp Date:
Principal Investigator Charles J. Foulks, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators:
Key Words: Hyperparathyroidism	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 775.80

Number of Subjects Enrolled During Reporting Period: 13

Total Number of Subjects Enrolled to Date: 13

Date of Periodic Review 10 May 84 Results Continue

Objective(s): To gather detailed information about renal function in patients with primary hyperparathyroidism at the time of diagnosis and to follow these functions serially in patients not undergoing surgery. These data should permit a more precise estimate of the risk of "medical" therapy versus "surgical" therapy in patients with mild, asymptomatic, primary hyperparathyroidism.

Technical Approach: Serial 24 hours urine collections were submitted for GFR measurement with serial Ca^{++}, PTH determinations.

Progress: One patient was excluded secondary to development of arteriosclerotic heart disease. Three patients underwent surgery. Osmotic fragility studies have been completed. No changes in renal function have been noted.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-34-81 Status: Ongoing

Title: The Effect of Propranolol on Cardiac Ejection Fractions as Determined By Gated Scans in Thyrotoxic Patients.

Start Date 15 Jun 81	Est Comp Date:
Principal Investigator Thomas J. Taylor, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators: William J. Georgitis, M.D., MAJ, MC Michael F. Hartshorne, M.D., MAJ, MC
Key Words: Thyrotoxic patients	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 1

Total Number of Subjects Enrolled to Date: 2

Date of Periodic Review 10 May 84 Results Continue

Objective(s): To study the effects of Inderal on cardiac ejection fractions in thyrotoxic patients and thereby critically assess the relative merits of this mode of therapy.

Technical Approach: MUGA studies are used to evaluate cardiac parameters in thyrotoxic patients before and after administration of Propranolol.

Progress: This study is progressing very slowly because of scarcity of patients eligible for participation.

Detail Summary Sheet

Date: 25 Oct 84	Proj No: C-35-81	Status: Completed

Title: Hepatic Artery Embolization in the Management of Primary Metastatic Hepatic Neoplasm

Start Date 15 Jun 81	Est Comp Date:
Principal Investigator Walter H. Harvey, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: James F. Boyd, M.D., LTC, MC
Key Words: Embolization	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

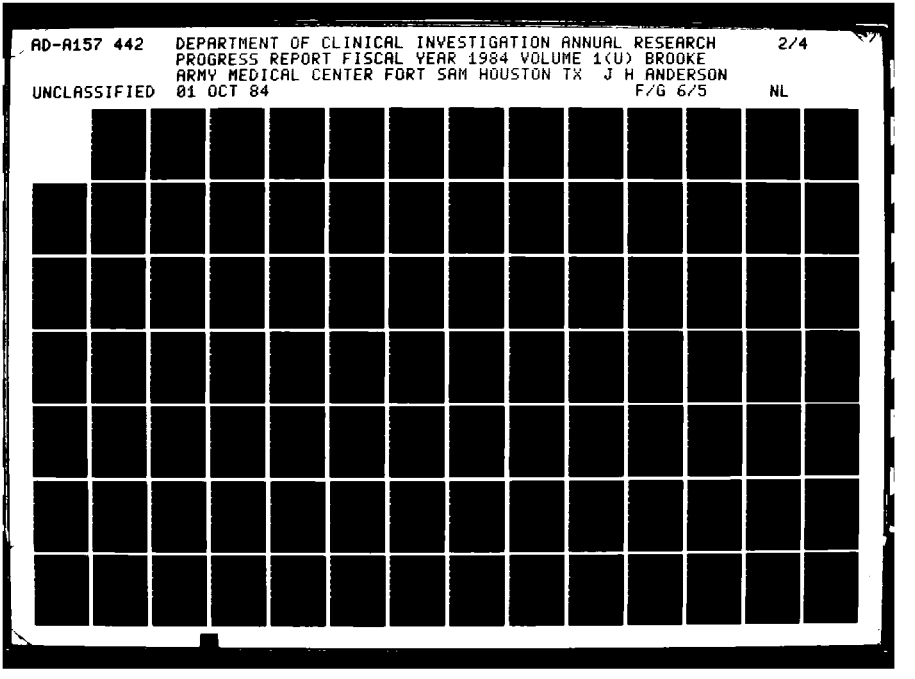
Total Number of Subjects Enrolled to Date: 26

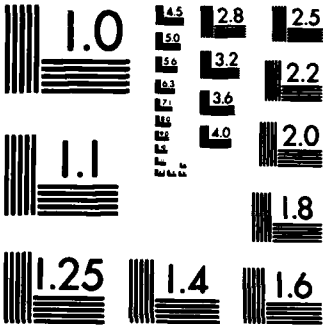
Date of Periodic Review 10 May 84 Results Completed

Objective(s): To determine the response rate of hepatic embolization of primary metastatic neoplasia in liver; to evaluate the morbidity of hepatic embolization; to evaluate the response rates of patients undergoing embolization with metastatic disease to liver to a historical control group.

Technical Approach: Patients with metastatic or primary neoplasm in liver undergo percutaneous hepatic artery catheter placement confirmed by angiography. When catheter placement is corrected embolization is carried out by injecting Ivalon® (polyvinyl particles) for embolization of right and/or left hepatic arteries.

Progress: Twenty six patients were entered on this study. All were followed until they expired.


AD-A157 442
DEPARTMENT OF CLINICAL INVESTIGATION ANNUAL RESEARCH
PROGRESS REPORT FISCAL YEAR 1984 VOLUME 1(U) BROOKE
ARMY MEDICAL CENTER FORT SAM HOUSTON TX J H ANDERSON
2/4
UNCLASSIFIED
01 OCT 84
F/G 6/5
NL



Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-52-81 Status: Ongoing

Title: Effect of Aspirin (ASA) on Airway Responses.

Start Date 7 Jul 81	Est Comp Date:
Principal Investigator (vice Ramirez) Ana A. Ortiz, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Allergy-Immuno.	Associate Investigators: Dane C. McBride, M.D., MAJ, MC
Key Words: Airway responses	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To investigate the effects of aspirin on airway responses in man. Specifically, the following questions will be answered: a. What effect does ASA have on upper and lower airway resistance in patients with non-allergic rhinitis with eosinophilia (NARES)? and b. Are patients with NARES - or any identifiable subset thereof - at particular risk of developing lower airway obstruction from aspirin?

Technical Approach: Subjects are to be challenged with 10 grains of aspirin and their nasal airway resistance and pulmonary functions will be measured and followed.

Progress: No patients were enrolled since the reporting period since the equipment necessary for the study was not available. Once the new investigators become familiar with the equipment, patients will be enrolled.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-58-81 Status: Ongoing

Title: The Specificity of Priming on the Nasal Mucous Membranes by Allergens and the Effect of Pharmacological Intervention.

Start Date 20 Aug 81	Est Comp Date:
Principal Investigator (vice Ramirez) Ana A. Ortiz, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Allergy-Immunol.	Associate Investigators: Dane C. McBride, M.D., MAJ, MC
Key Words: Allergens	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To investigate further phenomena of mucous membrane priming by antigens. a. Does it occur in different aeroallergen systems; b. Is the priming effect on the nasal mucosa specific for the allergen that induces it? c. What is the effect, if any, of antihistamines, intranasal corticosteroids and cromolyn sodium on nasal priming? d. Is the priming effect due to an increase in specific IgE?

Technical Approach: Study subjects will be challenged intranasally to the appropriate allergens over successive days to prime their mucus. By challenging with a different allergen to which the patient is also resistive, we will determine if the phenomenon is specific or not. Also, antihistamines, corticosteroids and cromolyn sodium will be used prior to the study to determine whether priming can be pharmacologically inhibited. Specific IgE will then be obtained.

Progress: No patients were enrolled during the reporting period. Patients will be enrolled as soon as the new investigators become familiar with the equipment.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-1-82 Status: Completed

Title: Chronic Cardiopulmonary Adaptations in Pentathlon Athletes.

Start Date 21 Oct 81	Est Comp Date:
Principal Investigator Bernard J. Rubal, Ph.D., DAC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC Stuart Damore, M.D., MAJ, MC
Key Words: Pentathlon athletes	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 10

Date of Periodic Review 9 Mar 84 Results Completed

Objective(s): To identify the risks and/or benefits of long-term, intense endurance training and to examine the cardiovascular adaptations associated with athletic training.

Technical Approach: Electrocardiography, echocardiography, treadmill stress test (^{201}TR) and radionuclide ventriculography were employed to determine the long term risk or benefits of chronic endurance conditioning.

Progress: Pentathletes were found to have a combination of eccentric and concentric hypertrophy and cardiac masses which were on the upper limits of normal. ^{201}TR scintigraphy and radionuclide ventriculography revealed that the athletes normally perfused their enlarged heart - at rest and during maximum stress test.

Detail Summary Sheet

Date: 25 Oct 84	Proj No: C-3-82	Status: Ongoing

Title: Assessment of Sunscreen Substantivity.

Start Date 21 Oct 81	Est Comp Date:
Principal Investigator Eric W. Kraus, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Dermatology	Associate Investigators: James H. Keeling, M.D., MAJ, MC
Key Words: Sunscreen	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 40

Total Number of Subjects Enrolled to Date: 140

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To compare the protection offered by sunscreens after swimming with that achieved when not exposed to water.

Technical Approach: Three sunscreens tested per volunteer. Bilateral paired comparison one side of test site (back) exposed to water the other side not exposed. All sites exposed to 2-14 MED UVB (natural sunlight) as measured by four UVB detectors. Degree of erythema was determined after 24 hours. Sun protection factor (SPF) was determined on all sunscreens both with and without 40 minute water exposure.

$$SPF = \frac{\text{MED } (mj/cm^2) \text{ of sunscreen treated site}}{\text{MED } (mj/cm^2) \text{ of non treated site}}$$

Progress: Water resistant sunscreens with tested SPF 15 ratings: Piz Buin, Elizabeth Arden Suncare, Juvena 10, Ellen Betrix 8.

Sunscreens as above with SPF $\geq$ 10 but less than 15
Total eclipse, Supershade (Coppertone) Sundown 15

Sunscreens without water resistance
Ultra Vera, Estee Lauder 15, Lancaster, Marbert 8, Rubinstein 10

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-10-82 Status: Ongoing

Title: Effects of Asynchronous and Nonhomogeneous Regional Function on Global Parameters.

Start Date 18 Nov 81	Est Comp Date:
Principal Investigator William E. Craig, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): 1) To establish a model for nonhomogeneous, segmental contraction and relaxation patterns in the chronically instrumented conscious dog.

2) To use the model to further understand and evaluate the abnormalities of diastolic function similar to those seen in clinical disease states.

Technical Approach: The purpose of this project is to use hemodynamic data obtained from instrumented dogs through collaboration with Dr. Pagani in Milan, Italy. This data is then analyzed by computer techniques using mathematical models of the effects which asynchronous ventricular contraction has on overall ventricular function.

Progress: The data obtained thus far indicates that abnormalities of global ventricular function can result simply by the introduction of asynchronous ventricular contraction. The abnormalities seen are similar to abnormalities reported in patients who also have asynchronous ventricular contraction.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-11-82 Status: Completed

Title: Single-Dose Evaluation of Resting Hemodynamic Effects of Oral Nifedipine in Patients with Hypertrophic and Acquired Left Ventricular Hypertrophy.

Start Date 4 Dec 81	Est Comp Date:
Principal Investigator William E. Craig, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC
Key Words: Ventricular hypertrophy Cardiomyopathy, hypertrophic	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 7

Date of Periodic Review 9 Mar 84 Results Continue

Objective(s): To evaluate the effects of Nifedipine on resting hemodynamics in patients with hypertrophic cardiomyopathy and acquired left ventricular hypertrophy.

Technical Approach: Patients with hypertrophic cardiomyopathy undergoing cardiac catherization in the laboratory comprise this study. Those patients participating in the study underwent evaluation of baseline hemodynamics followed by repeat measurements during Nitroprusside infusion and following administration of sublingual Nifedipine. During each study period complete evaluation of cardiovascular pressures, cardiac outputs, and echocardiographic parameters are obtained.

Progress: The data obtained indicated that Nifedipine has direct myocardial effects on patients with hypertrophic cardiomyopathy which improves the diastolic performance of the left ventricle.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-13-82 Status: Ongoing

Title: Intracardiac Pressure and Flow Changes Following Amyl Nitrite Inhalation.

Start Date 8 Jan 82	Est Comp Date:
Principal Investigator (vice Moody) Steven Bailey, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: William E. Craig, M.D., LTC, MC Joseph P. Murgo, M.D., COL, MC Bernard J. Rubal, Ph.D., DAC
Key Words: Intracardiac pressure	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To better understand the hemodynamic events responsible for the auscultatory changes following amyl nitrite inhalation in normal man.

Technical Approach: Patients undergoing cardiac catheterization for clinical indications receive additional hemodynamic evaluation following amyl nitrite inhalation in addition to the usual hemodynamics obtained in the cardiac catheterization laboratory.

Progress: No patients have been entered in this study. However, this protocol remains of interest to cardiologists and will be continued.

Detail Summary Sheet

Date: 22 May 84 Proj No: C-24-82 Status: Terminated

Title: Duration of Nosocomial Oropharyngeal Colonization Following Hospitalization.

Start Date 9 Mar 82	Est Comp Date:
Principal Investigator Charles E. Davis, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Infectious Dis.	Associate Investigators:
Key Words: Nosocomial	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 84 Results Terminate

Objective(s): To determine the duration of the changes in pharyngeal flora (gram negative rods and Staph aureus) acquired by hospitalized patients.

Technical Approach: None.

Progress: This study was terminated due to lack of progress.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-27-82 Status: Terminated

Title: The Role of Patient Education in Diabetes Care Utilizing Video Disc and Computer Technology.

Start Date 5 Mar 82	Est Comp Date:
Principal Investigator Thomas J. Taylor, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators: William J. Georgitis, M.D., MAJ, MC James H. Anderson, Jr., M.D., LTC, MC
Key Words: Diabetes	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review n/a Results

Objective(s): A video disc program is available that provides comprehensive diabetes education. We intend to evaluate the role of this teaching program in improving patient compliance and patient understanding of diabetes.

Technical Approach: None.

Progress: This study was replaced by a more comprehensive teaching program.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-28-82 Status: Terminated

Title: The Dose of Venom in Polistes (Wasp) Hypersensitivity.

Start Date 5 May 82	Est Comp Date:
Principal Investigator Daniel A. Ramirez, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Allergy-Immunol.	Associate Investigators:
Key Words: Hypersensitivity	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 Mar 84 Results Continue

Objective(s): To determine whether the current recommended dose of venom is appropriate for polistes sensitive patients.

Technical Approach: Patients who currently receive recommended dose of polistes venom immunotherapy (100 mcg) are candidates for this study. They will be evaluated by drawing venom specific IgE/IgG and by a controlled sting in the hospital.

Progress: Study terminated due to release from active duty of the principal investigator.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-29-82 Status: Ongoing

Title: A Comparison of the Accuracy of the Sphygomomanometric and Oscillometric Blood Pressure Measuring Techniques.

Start Date 5 May 82	Est Comp Date:
Principal Investigator William R. Cox, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC Bernard J. Rubal, Ph.D., DAC
Key Words: Blood pressure Pulse wave velocity Oscillometry	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 11

Total Number of Subjects Enrolled to Date: 32

Date of Periodic Review 11 May 84 Results Continue

Objective(s): 1) To compare the systolic, diastolic and mean blood pressure obtained by sphygomomanometry and oscillometry with an intravascular measurement of blood pressure obtained by high fidelity micromanometry during cardiac catheterization.

2) To evaluate the effect of occlusion cuff length on the accuracy of the noninvasive measurement of blood pressure.

Technical Approach: Non-invasive blood pressure is recorded simultaneous with invasive blood pressure during cardiac catheterization.

Progress: Enrollment has been slowed by equipment repairs and personnel shortages; however, the investigators plan to continue to recruit patients.

Detail Summary Sheet

Date: 16 May 84 Proj No: C-31-82 Status: Terminated

Title: Evaluation of a Non-Invasive Strategy for the Diagnosis of Coronary Artery Disease.

Start Date 18 May 82	Est Comp Date:
Principal Investigator David L. Brown, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC
Key Words: Coronary artery disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 33

Total Number of Subjects Enrolled to Date: 40

Date of Periodic Review 11 May 1984 Results Terminated

Objective(s): To evaluate the predictive value of a specific sequence of non-invasive tests to determine the probability of coronary artery disease in patients prior to selective coronary angiography.

Technical Approach: Patients undergoing cardiac catheterization were also subjected to cardiokymography.

Progress: The study was terminated due to inability to maintain quality control of the performance of the test and inability to stabilize personnel.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-37-82 Status: Ongoing

Title: Evaluation of Sodium Ipodate as an Adjunctive Therapy to Radioactive Iodine for Graves' Hyperthyroidism.

Start Date 7 Jul 82	Est Comp Date:
Principal Investigator Thomas J. Taylor, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators: William J. Georgitis, M.D., MAJ, MC
Key Words: Graves' hyperthyroidism	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To evaluate the potetial advantges of the use of sodium ipodate following radioactive iodine administration in the treatment of Graves' hyperthyroidism.

Technical Approach: The protocol was amended to study two groups. One group would receive the placebo and the other group the drug. Since the investigators have been unable to obtain the placebo, randomization will be changed.

Progress: None, due to inability to obtain placebo.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-38-82 Status: Ongoing

Title: Autologous Bone Marrow Transplantation in Resistant Neoplasms: A Phase I Study.

Start Date 7 Jul 82	Est Comp Date:
Principal Investigator Walter H. Harvey. D.O., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: James F. Boyd, M.D., LTC, MC Glenn M. Mills, M.D., MAJ, MC Barbara Reeb, DAC John J. Posch, Jr., DAC
Key Words: Bone marrow transplant	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): 1) To develop a bone marrow transplantation program at Brooke Army Medical Center.

2) To participate in research and clinical studies individually as part of the Southwest Oncology Group.

3) To establish a competent transplantation service for all eligible DOD patients for present clinical indications and future indications.

Technical Approach: Bone marrow stem cells will be obtained by multiple bone marrow aspirations under general or local anesthesia. The marrow will be prepared by accepted methods and either frozen for storage or returned to the patient after intensive chemotherapy.

Progress: The cryopreservation of bone marrow is at a standstill. Equipment procurement continues and they should be able to do autologous transplant within 90 days. However, the investigators state that they will not be able to cryopreserve the marrow unless adequate space is found at Beach Pavilion in which to place the equipment. Since the marrow transplants would be carried out at Beach Pavilion, it is of utmost importance for the equipment to be at Beach. The investigators feel that this study should receive priority and all efforts directed at procuring space, equipment and materials.

Detail Summary Sheet

Date: 6 Nov 84 Proj No: C-60-82 Status: Completed

Title: The Effects of Pneumatic Trousers on Cardiovascular Hemodynamics.

Start Date 8 Sep 82	Est Comp Date:
Principal Investigator (vice Bickell) Michael R. Geer, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: William S. Craig, M.D., LTC, MC Joseph P. Murgo, M.D., COL, MC William H. Bickell, M.D., CPT, MC
Key Words: Pneumatic trousers	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 5

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To study the effects of external counterpressure on the cardiovascular system through invasive monitoring.

Technical Approach: Five normovolemic human volunteers previously selected for cardiac catheterization were involved in the study. Right and left heart catheterization with multisensor catheters was performed. External counter pressure with Jobst gladiator MAST was sequentially applied up to a maximum of 100 mm Hg with a total inflation time of 10 minutes. The MAST was rapidly deflated with serial measurements of the following parameters: mean right atrial pressure (RAm), mean pulmonary artery pressure (PAm), left ventricular and diastolic pressure (LVEDP), and mean arterial pressure (MAP).

Progress: Comparison of the pre- and post-deflation hemodynamics resulted in the following observations: a significant decrease in MAP of 37 mm Hg ($P < .01$), in conjunction with a simultaneous significant decrease in right and left heart filling pressures; i.e., decrease in RAm, PAm, LVEDP of 81%, 58% and 81% respectively ($P < .01$). Analysis of simultaneous right and left pressures using multisensor catheters suggest that the hypotensive response to rapid MAST deflation is secondary to a simultaneous decrease in both preload and afterload.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-62-82 Status: Terminated

Title: The Effect of Calcium Channel Blockers on Sickling and Blood Viscosity in Hgb SS Disease.

Start Date 27 Sep 82	Est Comp Date:
Principal Investigator James F. Boyd, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: Barbara Reeb, DAC John J. Posch, Jr., DAC
Key Words: Calcium channel blockers SS disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 120.00

Number of Subjects Enrolled During Reporting Period: 2

Total Number of Subjects Enrolled to Date: 2

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To study the in vitro effect of calcium channel blockers on sickling and on blood viscosity in Hgb SS disase.

Technical Approach: Blood from patients with SS disease is incubated with or without 100 ng/ml verapamil. The blood is then exposed to low O_2 tension to maximize sickling. 1 ml of each sample (with or without verapamil) is tested for whole blood viscosity with a cone-plate viscometer.

Progress: With two patients tested, there has been no reduction in whole blood viscosity following incubation with verapamil.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-63-82 Status: Ongoing

Title: Evaluation of Catheter-Mounted Micromanometers vs External Fluid Transducers for Continuous Pressure Monitoring in the Coronary Care Unit.

Start Date 27 Sep 82	Est Comp Date:
Principal Investigator William S. Craig, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC Bernard J. Rubal, Ph.D., DAC
Key Words: Transducers Micromanometers	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 3

Total Number of Subjects Enrolled to Date: 3

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To evaluate the use of high fidelity catheter-mounted micromanometer transducers on flow-directed balloon-tipped right heart catheters in the coronary care unity; to determine whether the more accurate prssures obtained from the micromanometers are significantly different than those obtained from conventional fluid-filled transducer systems and whether or not these differences would change or improve the clinical management of patients requiring hemodynamic monitoring.

Technical Approach: Patients in the Coronary Care Unit with Killip's Class III myocardial infarctions or unstable angina requiring Swan-Ganz catheterization undergo this catheterization with a special Swan-Ganz catheter which has been modified to contain a micromanometer pressure transducer. During the period of pulmonary artery pressure monitoring, the pressures obtained from the micromanometer are compared to those obtained from a standard fluid-filled transducer system.

Progress: The data obtained on all patients studied showed that the micromanometer transducers are much more accurate in their ability to trend pulmonary artery diastolic pressure. The difference in pressures recorded by the two systems are clinically significant and thus indicate the improved pressure monitoring capability of the catheter mounted transducers.

Detail Summary Sheet

Date: 31 May 84 Proj No: C-66-82 Status: Completed

Title: Detection of Immune Complexes in Serum and Synovial Fluid of Patients with Rheumatic Diseases and Other Diseases Characterized by Circulating Immune Complexes.

Start Date 27 Sep 82	Est Comp Date:
Principal Investigator Charles S. Via, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Rheumatology	Associate Investigators: Robert C. Allen, M.D., Ph.D., MAJ, MC
Key Words: Immune complexes	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 19

Total Number of Subjects Enrolled to Date: 19

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): 1) To study the effects of sera and synovial fluids containing immune complexes (IC's) on normal granulocyte function.

2) Measure the pre- and post-stimulation oxygenation activity of granulocytes (using microliter quantities of whole blood or synovial fluid aspirates) from patients with immune complex associated diseases.

Technical Approach: The stimulatory capacity of a serum, expressed as per cent PMNL chemiluminescence (%CL), was calculated by dividing the integral CL response to the serum by the integal CL response to a standard stimulus, opsonified zymosan. Testing was performed on 50 serum specimens obtained chronologically through the clinical course of 8 SLE patients and on 14 sera from 11 controls.

Progress: Sera from SLE patients in remission and controls wer non-stimulatory with mean %CL $\pm$ SE values of 3.1 $\pm$ 0.7 and 3.5 $\pm$ 0.9 respectively. Sera obtained from SLE patients during active disease yielded a mean %CL value of 26.6 $\pm$ 9.0. The stimulatory capacity of SLE serum was concentration dependent and was enhanced by the addition of normal serum complement. The CL response was positively correlated with serological measures of SLE activity such as antibodies to double stranded DNA ($p < .0001$) and C1q binding immune complexes ($p < .001$). These findings are consistent with the hypothesis that during active SLE, PMNLs become metabolically activated by exposure to serum containing

immune complexes and possibly other factors. Activation of PMNL may contribute to the development of vasculitis, leukopenia, and increased susceptibility to infection. The CL approach described allows sensitive, functiuonal, ex vivo assessment of the phlogistic properties of serum and is applicable for monitoring SLE disease activity.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-67-82 Status: Ongoing

Title: Pathogenesis of Tissue Injury in Porphyria.

Start Date 27 Sep 82	Est Comp Date:
Principal Investigator Charles W. Lewis, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Dermatology	Associate Investigators: James H. Keeling, M.D., MAJ, MC Deborah Spiva, M.D.
Key Words: Porphyria	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): 1) To investigate the pathophysiology by which circulating porphyrins produce hyperviscosity states and to determine the extent of tissue injury produced.

2) To determine the effects of ultraviolet rays (UVA, UVB, Soret Band) on the deposition of porphyrins in the skin.

3) To evaluate the role of erythropoietin as the primary stimulus of the bone marrow's overproduction of porphyrin precursors/heme and to determine the effect of suppressing this stimulus.

Technical Approach: Red cell exchanges and limited plasmapheresis are performed with the Haemonetics PEX in the MICU with continuous cardiac monitoring, using washed autologous units and random blood units to maintain hematocrits about 35%. Donor units were matched for all major blood group antigens and underwent same washing procedures.

Induction phase consisted of 1000 ml RBC exchanges every 3 to 7 days until complete remission of clinical symptoms and normal porphyrin levels were obtained (3 to 10 exchanges). Multiple parameters were monitored pre- and post exchange.

Progress: Ten patients (with AIP, EPP, PCT, HC or variegate porphyria) have obtained clinical and chemical remissions by combining plasmapheresis with red cell exchange transfusions using autologous washed cells (yielding neocytes) and/or donor neocytes. Remissions are maintained by periodic neocyte exchanges at intervals of 4 to 12 weeks. No serious side effects or complications have occurred.

Detail Summary Sheet

Date: 9 Mar 84 Proj No: C-7-83 Status: Terminated

Title: The Clinical Effects of Four Different Topical Nitrate Preparations in Patients with Stable Angina Pectoris.

Start Date 10 Nov 82	Est Comp Date:
Principal Investigator Steven Bailey, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC
Key Words: Angina pectoris	Tinker Murray, DAC
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To evaluate the clinical effectiveness of Nitrol, Transderm-Nitro, Nitro-Dur, and Nitro-Disc in the medical management of Patients with stable angina pectoris.

Technical Approach: None.

Progress: Study terminated because pharmaceutical companies are unable to supply placebo nitrate preparations.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-15-83 Status: Ongoing

Title: The Treatment of Cellulitis.

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator C. Kenneth McAllister, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Infectious Dis.	Associate Investigators:
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 19

Total Number of Subjects Enrolled to Date: 25

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To compare the response of outpatients with cellulitis who are randomized to receive either erythromycin or dicloxacillin; to compare the response of in-patients with cellulitis who are randomized to receive either erythromycin or nafcillin.

Technical Approach: Patients with the clinical diagnosis of cellulitis who are candidates for outpatient therapy are randomized to receive either erythromycin or clindamycin treatment. The response to therapy from patients receiving the respective antibiotics is measured by clinical response and quantitative measurements of the cellulitis.

Progress: To date approximately 25 patients have been studied with no appreciable differences in the two antibiotics involved. We would like to continue the study to evaluate at least 100 patients.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-16-83 Status: Ongoing

Title: Prospective Evaluation of Clinical, X-ray, Histologic, Scintigraphic, and Microbiologic Characteristics of Diabetic Feet. (Collaborative Study with Walter Reed Army Medical Center)

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator C. Kenneth McAllister, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Infectious Dis.	Associate Investigators:
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review n/a Results _____

Objective(s): To correlate specific x-ray, scintigraphic, clinical and microbiologic characteristics with each other and with the histology of the diseased dibetic foot so clinicians may better manage their patients.

Technical Approach: To look at the histologic appearance of osteomyelitis in the amputated diabetic foot. To compare the histologic appearance with clinical and radiographic findings to determine the specificity of diagnosing osteomyelitis.

Progress: To date no specimens have been entered in this study from BAMC. The principal investigator at WRAMC would like to keep the study in progress.

Detail Summary Sheet

Date: 16 Oct 84 Proj No: C-21-83 Status: Terminated

Title: An Investigation of Immunological Reaction to Human Serum Albumin.

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator Daniel A. Ramirez, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Allergy-Immunol	Associate Investigators:
Key Words: Human serum albumin	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To determine whether allergy patients receiving injections of allergy extracts containing human serum albumin develop evidence if IgE or IgG antibodies directly towards human albumin.

Technical Approach: Patients seen on re-evaluation appointments in the Allergy Clinic were studied. As part of their regular work-up they were skin tested with an HSA control and histamine. Most of the participants were clinic patients seen in the past 2 years.

Progress: It was felt to be more convenient to enter patients seen on re-evaluation appointments rather than have them return specifically for testing only to HSA and histamine. In view of this, it was elected to terminate the study.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-22-83 Status: Terminated

Title: The Sputum Gram Stain and Culture in the Diagnosis of Adult Community-Acquired Pneumonias.

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator Lawrence Pupa, M.D.,CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine	Associate Investigators:
Key Words: Adult pneumonia	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 42

Date of Periodic Review 11 May 84 Results Completed

Objective(s): To conduct a prospective evaluation of the usefulness of the sputum gram stain and subsequent sputum culture results in the diagnosis and management of community acquired pneumonia in the adult; to document the relative incidences of various organisms in causing community acquired pneumonias.

Technical Approach: Sputums obtained during routine evaluation of patients with community-acquired pneumonia were reviewed by both housestaff and principal investigators. Comparisons were made to directed and nondirected cultures and effect of therapeutic decision analyzed.

Progress: This study was discontinued due to excessive time frame and significant change in antibiotic prescribing leading to inadequate patient numbers in each group.

Detail Summary Sheet

Date: 16 Oct 84 Proj No: C-23-83 Status: Completed

Title: A Comparison of Pseudomonic Acid with Placebo in Patients with Skin Infections.

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator Eric W. Kraus, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Dermatology	Associate Investigators: Charles W. Lewis, M.D., COL, MC
Key Words: Pseudomonic Acid	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 8

Date of Periodic Review _____ Results _____

Objective(s): To compare the safety and efficacy of pseudomonic acid with placebo in patients with skin infections.

Technical Approach: Patients with culture proven secondarily infected cutaneous lesions (i.e., abrasions, burns, etc.) were treated on a double-blind protocol comparing pseudomonic acid to placebo.

Progress: Enough clinical trials were obtained to enable the drug company to request release of the drug. Eight patients from BAMC participated in this trial with no significant adverse reactions.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-26-83 Status: Onging

Title: A Study of the Transmission of the Arterial Pulse Pressure Wave Form in the Descending Aorta of Man.

Start Date 16 Mar 83	Est Comp Date:
Principal Investigator Ricky D. Latham, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC Nico Westerhof, Ph.D.
Key Words: Arterial pulse pressure wave form	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 4

Total Number of Subjects Enrolled to Date: 18

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To examine the changs in the arterial pulse pressure wave form throughout the descending aorta of man; to determine the pulse wave velocity at various sites in the descending aorta; to determine the significance of wave reflection sites in the descending aorta.

Technical Approach: Special 6 micromanometer mounted catheter is used in elective cardiac catheterization. Valsalva, Muller and femoral artery occusions are performed. Waveforms are analyzed for foot-foot velocity and phase velocity.

Progress: Usable results have been obtained in nine patients. Normal subject phase has been completed.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-27-83 Status: Terminated

Title: A Multi-Site Study of the Effects of Intravenous Didronel (Etidronate Disodium) on Hypercalcemia Due to Malignant Disease or Primary Hyperparathyroidism (CA 10).

Start Date 16 Mar 83	Est Comp Date:
Principal Investigator Thomas J. Taylor, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators: James F. Boyd, M.D., LTC MC
Key Words: Hyperparathyroidism Hypercalcemia	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To compare the effectiveness and tolerance of saline plus intravenous infusion of Didronel with saline alone in loewring the serum calcium level in patients experiencing hypercalcemia due to malignant disease or primary hyperparathyroidism; to evaluate the effectiveness of oral Didronel at maintaining serum calcium in the normal range.

Technical Approach: None.

Progress: One patient was considered for the study but did not sign the consent form and left the hospital untreated.

The study was terminated because of frequent changes in the protocol by the company. Because of the voluminous amount of paperwork associated with these changes, the investigators were reluctant to continue the study.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-29-83 Status: Terminated

Title: The Effect of Intravenous Administration of Didronel (Etidronate Disodium) on Serum Calcium in Patients with Hypercalcemia Due to Malignant Disease (CA-04B).

Start Date 19 Apr 83	Est Comp Date:
Principal Investigator Thomas J. Taylor, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators:
Key Words: Hypercalcemia	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To examine the effectiveness of intravenous infusion of etidronate disodium in lowering the serum calcium level in patients experiencing hypercalcemia due to malignant disease; to evaluate further the tolerance of intravenous infusion of etidronate disodium in these patients.

Technical Approach: None. No patients were entered on the study

Progress: This study was terminated because of frequent changes in the protocol by the drug company.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-33-83 Status: Completed

Title: Nifedipine in Methacholine-Induced Bronchospasm.

Start Date 19 Apr 83	Est Comp Date:
Principal Investigator Joseph I. Matthews, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Pulmonary Dis.	Associate Investigators:
Key Words: Bronchospasm	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 8

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To determine if nifedipine can alter bronchial reactivity in patients with methacholine-induced bronchospasm.

Technical Approach: Eight patients were given successive inhalations of 0.1% methacholine until 400 inhalation units (80 inhalations) were given or until bronchospasm inhibited further inhalation. Spirometry was performed after 1, 3, 6, 10, 20, 40 inhalations. The test was repeated after ingestion of 20 mg of nifedipine in an attempt to blod or ameliorate methoachonline-induced bronchospasm.

Progress: Eight patients were tested before and after 20 mg. of nifedipine. Nifedipine did not alter methacholine-induced bronchospasm.

Detail Summary Sheet

Date: 10 Apr 84	Proj No: C-37-83	Status: Terminated

Title: Short-Course Chemotherapy of Pulmonary Tuberculosis.

Start Date 6 May 83	Est Comp Date:
Principal Investigator Eugene T. Etzkorn, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Infectious Dis.	Associate Investigators:
Key Words: Tuberculosis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 10 Apr 84 Results Terminate

Objective(s): 1) To compare the efficacy, toxicity, and acceptability of a 6-month regimen of isoniazid (i) and rifampin (R), supplemented with pyrazinamide (Z) for the first two months, with a control regiment of 9 months of IR in patients with pulmonary tuberculosis.

2) To determine the acceptability of supervised twice-weekly therapy for patients who fail to adhere to the self-administered daily regimens.

Technical Approach: None.

Progress: Only two patients who were eligible for the study were seen at BAMC in the past 14 months. We have too few TB patients to justify the paperwork necessary to participate in this trial.

Detail Summary Sheet

Date: 10 May 84 Proj No: C-38-83 Status: Terminated

Title: Echocardiographic Evaluation of Cardiac Performance and Mitral Valve Function Under +Gz Stress.

Start Date 6 May 83	Est Comp Date:
Principal Investigator Paul V. Celio, M.D., CPT, AFMC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators:
Key Words: Echocardiography	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review 10 May 84 Results Terminate

Objective(s): To examine the alterations in cardiac perforance and mitral function during increased gravitational loading induced by acceleration in the human centrifuge.

Technical Approach: Several attempts were made to install ultrasound equipment in the human centrifuge. These attempts failed.

Progress: None. The diagnostic ultrasound equipment could not be mounted in the human centrifuge.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-39-83 Status: Ongoing

Title: Mechanism of Exercise Limitation in Patients with Obstructive Lung Disease.

Start Date 6 May 83	Est Comp Date:
Principal Investigator Joseph I. Matthews, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Pulmonary Dis.	Associate Investigators: Bruce A. Bush, M.D., CPT, MC Frank W. Ewald, Jr., M.D., MAJ, MC
Key Words: Obstructive lung disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 10

Total Number of Subjects Enrolled to Date: 10

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To determine the mechanism by which patients with obstructive lung disease are limited in their ability to perform exercise.

Technical Approach: Patients with obstructive lung disease and age-matched control patients without cardiac or pulmonary disease are exercised on a cycle ergometer. Each patient had a maximal incremental test, a steady state test for 6 minutes at 75% of their maximum workload, and a steady state test at 50% of their maximum workload.

Progress: Ten normal controls and ten patients with chronic obstructive pulmonary disease have been studied to date. Preliminary analysis suggests that patients with chronic obstructive pulmonary disease have inappropriately high minute ventilation at each level of exercise.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-42-83 Status: Terminated

Title: Electrolye Abnormalities and Delirium Tremens.

Start Date 6 May 83	Est Comp Date:
Principal Investigator Lawrence Pupa, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine	Associate Investigators:
Key Words: Delirium tremens	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 22

Date of Periodic Review n/a Results

Objective(s): Prospective evaluation of electrolyte abnormalities as predictors for the development of delirium trements.

Technical Approach: Patients admitted to BAMC medical wards with the diagnosis of alcohol withdrawal, made either before or after admission, were eligible for the study. Daily SMA-6 for the first five hospital days or until discharge were recorded. Correlation of the daily serum electrolytes and magnesium and development of DT's was made prospectively.

Progress: This study was terminated due to inadequate patient numbers.

Detail Summary Sheet

Date: 26 Oct 84	Proj No: C-51-83	Status: Ongoing

Title: Use of Isotretinoin in Prevention of Basal Cell Carcinoma.

Start Date 16 Jun 83	Est Comp Date:
Principal Investigator Stuart J. Salasche, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Dermatology	Associate Investigators:
Key Words: Basal cell carcinoma	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 28

Total Number of Subjects Enrolled to Date: 28

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To evaluate the effectiveness of low dosage levels of isotretinoin in reducing the incidence of basal cell carcinomas in a high risk population; to examine possible side effects associated with long term administration of low doses of isotretinoin.

Technical Approach: Patients having at least two basal cell carcinomas in the last five years are contacted. If interested in participation, they are screened according to protocol. If all inclusion factors are met, they are randomized and begun on medication or placebo. After beginning medication, follow-up will occur at two weeks, three months, six months, and every six months thereafter for the duration of the study. Patients are on medication for three years and have follow-up for two years afterward. Physical exams are done yearly. History, laboratory data, total skin exam and necessary biopsies are done at each visit. Cervical and thoracic lateral spine films re done at 0 and 36 months on each patient and additional films at 28 months for those having DISH at baseline.

Progress: Data collection testing was conducted in October and November 1983. Forms were revised prior to pilot of the study that was conducted January-May 1984. During the pilot, 21 patients were entered into the study. The study was initiated in earnest in July with 7 additional patients added to date; goal participation is 200-300 patients entered over the next 12-18 months. Patients have received the study well. Multiple BCC's have been identified and treated. Several of the patient have had mild cutaneous symptoms and/or mild arthralgias, two of which required reduction of medication and two were taken off medication.

C-51-83 (continued)

One patient experienced increased triglycerides that responded to reduced medication. No results as to effect on incidence of BCC can be ascertained at this early date.

Detail Summary Sheet

Date: 31 May 84	Proj No: C-55-83	Status: Terminated

Title: Efficacy of Weekly Pulse Methotrexate in the Treatment of Rheumatoid Arthritis: A Double Blind Crossover Study.

Start Date 8 Jul 83	Est Comp Date:
Principal Investigator Charles S. Via, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Rheumatology	Associate Investigators:
Key Words: Rheumatoid Arthritis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): 1) To evaluate the effectiveness of weekly pulse methotrexate therapy to control the activity of rheumatoid arthritis by subjective and objective criteria by means of a 27-week double blind, crossover study against placebo in patients with active rheumatoid arthritis who have failed therapy with gold salt and D-Penicillamine.

2) To evaluate the potential of long-term weekly pulse methotrexate therapy to halt or decrease the progression of destructive changes of the articular cartilage and periarticular bone by means of sequential x-ray evaluation.

3) To evaluate the potential for hepatic toxicity of weekly pulse methotrexate by sequential analysis of biochemical liver function studies and liver biopsy.

Technical Approach: None. The study was never started.

Progress: No patients were entered on this study because of inability to obtain Methotrexate. Therefore, the study was terminated.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-60-83 Status: Terminated

Title: Nifedipine in Patients with Recurrent Episodes of Bronchospasm.

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator Joseph I. Matthews, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Pulmonary Dis.	Associate Investigators:
Key Words: Bronchospasm Asthma	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 13 Jul 84 Results Continue

Objective(s): To determine if nifedipine can alter clinical episodes of bronchospasm in patients with asthma or allow patients with asthma to be maintained symptom-free on a low dosage of medication.

Technical Approach: None.

Progress: The placebo has not been received from the company. Since the drug company appears to be unwilling to support this study, the protocol is terminated.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-66-83 Status: Terminated

Title: Epidemiological, Clinical and Therapeutic Investigations into Haemophilus Ducreyi Infections in American Troops in Korea.

Start Date 18 Aug 83	Est Comp Date:
Principal Investigator John L. Carpenter, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine	Associate Investigators:
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 12 Jul 84 Results Terminate

Objective(s): 1) A demographic and clinical study of Haemophilus Ducreyi infections in American troops stationed in Korea.

2) Double-blind, controlled study comparing the efficacy of drug therapy with short courses of erythromycin, Septra, Doxycycline, Minocycline or Defoxitin

3) An epidemiological, clinical and microbiological/histopathological study of asymptomatic Korean contacts will be attempted.

Technical Approach: None.

Progress: Following approval, it was decided not to participate in the study.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-67-83 Status: Terminated

Title: AdOAP-High Dose Ara-C in Adult Acute Nonlymphocytic Leukemia (ANLL)

Start Date 9 Sep 83	Est Comp Date:
Principal Investigator James F. Boyd, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: Glenn M. Mills, M.D., MAJ, MC Marcus Troxell, M.D., CPT, MC
Key Words: Leukemia, nonlymphocytic	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 2

Total Number of Subjects Enrolled to Date: 2

Date of Periodic Review 12 Jul 84 Results Terminate

Objective(s): 1) To determine whether early intensification therapy with high dose Ara-C will improve long term disease-free survival.

2) To determine whether maintenance therapy with low dose subcutaneous Ara-C will improve disease-free survival.

3) To determine the effect of high dose Ar-C intensification therapy on the incidence of CNS relapse.

Technical Approach: All patients with a new diagnosis of acute leukemia who had not been previously treated were eligible for this study.

Progress: One patient failed to achieve remission with the primary induction regimen and was taken off the study. One patient had a prolonged and complicated nadir and because of his poor condition was not felt to be a candidate for high dose Ara-C consolidation. Further patients with acute leukemia were registed on SWOG studies.

Detail Summary Sheet

Date: 22 Oct 84	Proj No: C-70-83	Status: Terminated

Title: The STudy of the Safety and Efficacy of Nizatadine as an H_2 Antagonist in Patients with Duodenal Ulcer Disease.

Start Date 9 Sep 83	Est Comp Date:
Principal Investigator Fred Goldner, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Gastroenterology	Associate Investigators:
Key Words: Ulcer, duodenal	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review n/a Results

Objective(s): To evaluate the clinical safety and efficacy of Nizatidine in patients with acute duodenal ulcer disease.

Technical Approach: None

Progress: After obtaining approval to do the study, the principal investigator was informed that the San Antonio Center for Clinical Studies would not be conducting the study. A request to obtain the drug from Eli Lilly Co. was disapproved, and therefore, the study was terminated.

Detail Summary Sheet

Date: 16 Oct 84 Proj No: C-77-83 Status: Ongoing

Title: High Dose Busulfan with Autologous Bone Marrow Rescue for Solid Malignancies.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator James F. Boyd, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: Glenn M. Mills, M.D., MAJ, MC Roby Joyce, M.D., LTC, MC Walter H. Harvey, D.O., MAJ, MC Barbara Reeb, MT, DAC John J. Posch, Jr., MT, DAC
Key Words: Bone marrow rescue Busulfan	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review n/a Results

Objective(s): To study the response rate and toxicity of oral, high dose busulfan in malignancies refractory to standard therapy.

Technical Approach: Patients agreeing to participate will be admitted to the hospital and a Hickman catheter inserted into a large vein in the region of the shoulder. Following insertion of the catheter, approximately 600-900 cc. of marrow will be drawn from the hip bones and stored for transfusion the next day. Approximately two hours following the marrow collection, they will be given busulfan orally. The next morning they will receive transfusion of their bone marrow through the Hickman catheter.

Progress: Shortly after this study was registered, notification was received from HSC suspending the protocol until further notice. The protocol has been submitted to the Human Use Review Office for approval.

Detail Summary Sheet

Date: 13 Jul 84 Proj No: C-78-83 Status: Completed

Title: Dexamethasone, Diephenhydramine, Metoclopramide as Antiemetics in Cancer Chemotherapy.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Walter H. Harvey, D.O., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: Frederic A. Lombardo, Ph.D., CPT, MSC
Key Words: Antiemetic Chemotherapy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 25

Total Number of Subjects Enrolled to Date: 25

Date of Periodic Review 13 Jul 84 Results Completed

Objective(s): 1) To determine if this combination of agents will significantly reduce vomiting associated with cancer chemotherapy.

2) To compare these results to historical data of patients receiving standard therapy.

Technical Approach: Patients receiving cisplatin, nitrogen mustard, Dacarbazine, Actinomycin-D, or Adriamycin or subsequent chemotherapy with significant vomiting associated were eligible for the study.

Four hours prior to initiation of chemotherapy, patients were given dexamethasone IV. Three hours later diphenhydramine was given IV over a 15-30 minute period followed by metoclopramide IV over 15 minutes. Chemotherapy was then started. Upon completion of chemotherapy, metoclopramide was given every two hours or until there was no vomiting.

Progress: The regimen was extremely well tolerated with 90% total control of vomiting and 10% moderate to maximal control. This program has been adopted as a routine therapeutic regimen for control of vomiting following chemotherapy.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-79-83 Status: Terminated

Title: Investigation of Triiodothyronine Dependency Syndrome.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator William J. Georgitis, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators: Thomas J. Taylor, M.D., LTC, MC
Key Words: Triiodothyronine syndrome	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 13 Jul 84 Results Continue

Objective(s): To establish the existence of a dependency syndrome resulting from chronic, excessive hormone replacement with thyroid extract in the treatment of primary hypothyroidism.

Technical Approach: None.

Progress: This study was terminated due to transfer of principal investigator. no patients were enrolled prior to his departure.

Detail Summary Sheet

Date: 18 Jun 84 Proj No: C-80-83 Status: Completed

Title: Carbohydrate Malabsorption in the Irritable Bowel Syndrome (IBS).

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator John J. Perkner, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Gastroenterology	Associate Investigators: Fred Goldner, M.D., LTC, MC
Key Words: Irritable bowel syndrome	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 19

Total Number of Subjects Enrolled to Date: 19

Date of Periodic Review 15 June 1984 Results Completed

Objective(s): To determine if malabsorption of dietary carbohydrate contributes to development of symptoms (bloating, excess flatus and diarrhea) in patients with IBS.

Technical Approach: Nineteen irritable bowel patients with complaints of bloating, excess gas (flatulence or belching) and diarrhea were included in the study. The diagnosis of irritable bowel was primarily from history, physical examination, proctoscopy, and appropriate laboratory and radiological investigations. Any condition that might influence gut motility was avoided for at least 48 hours prior to the test. Smoking was prohibited for at least one hour before and during the test. Patients were kept NPO from midnight before the morning of the test, and nothing was allowed to be ingested during the test except water.

Participants were given five breath collection bags marked from zero to four hours in increments of one hour. On the morning of the test, the participant obtained a zero hour sample which was baseline for this particular person. He/she then ingested a test meal and collected breath samples at one hour intervals until all bags had been used. Then the bags were delivered to the Gastroenterology Clinic and the breath hydrogen test was run within 24 hours of delivery.

The participants were advised to use a test meal which they felt would aggravate their symptoms. They were advised to record as specifically as possible the ingredients of their test meal and to record their symptoms on a chart grading them from none to mild to severe.

C-80-83 (continued)

The Quinton Microlyzer was used to measure breath hydrogen. This is a special purpose gas chromatograph designed specifically to measure slight increases in hydrogen gas concentrations. Each collection bag submitted was analyzed twice to insure reproducibility of results. A rise of 15 ppm H_2 above baseline represented a positive result.

Progress: Of the nineteen subjects with IBS, three (16%) had breath hydrogen levels of 15 ppm or greater above the bsal level. Each had included a milk product in their test meal. All positive patients experienced only mild symptoms, and the most common complaint was bloating.

Conclusions: A small but significant percentage (16%) of irritable bowel patients followed by the Gastroenterology Clinic were malabsorbing a carbohydrate. The most likely carbohydrate was lactose, as each positive patient had ingested a milk product as part of their self-designed test meal. Further studies should now be done eliminating lactose from their diets, repeating the breath hydrogen test, and recorrelating the results with symptoms. If their breath hydrogen test remains positive, then another carbohydrate source should be sought.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-83-83 Status: Terminated

Title: A Study of Genetic Susceptibility to Mountain Cedar Pollinosis.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Daniel A. Ramirez, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Allergy-Immunol.	Associate Investigators:
Key Words: Mountain cedar pollinosis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 3,558.00

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review 13 Jul 84 Results Continue

Objective(s): To investigate whether there exists a genetic susceptibility to developing mount cedar pollinosis, especially in otherwise nonatopic subjects. Two aspects of this problem will be studied: a) Genetic susceptibility to mountain cedar pollinosis as a whole; b. Genetic susceptibility to mountain cedar allergy in patients with no other *sensitivities*.

Technical Approach: Patients were selected from a patient population previously identified and characterized. In essence, these patients have had thorough history and physical examination, positive skin tests, and total IgE determined. Blood was obtained and tissue typing for A, B, C, and DR antigens was done.

Progress: The study was terminated due to release from active duty of the principal investigator. No problems were encountere din the study. HLA frequencies observed showed no particular pattern of genetic susceptibility.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-84-83 Status: Terminated

Title: Evaluation of Systemic and Intracoronary Thrombolytic Therapy in Acute Myocardial Infarction.

Start Date 30 Sep 84	Est Comp Date:
Principal Investigator David L. Brown, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: William E. Craig, M.D., LTC, MC
Key Words: Myocardial infarction	Joseph P. Murgo, M.D., COL, MC
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 12 Jul 84 Results Terminate

Objective(s): To compare the effect of early myocardial reperfusion by intravenous and intracoronary thrombolysis to standard therapy during acute myocardial infarction.

Technical Approach: Patients admitted to the Coronary Care Unit will be randomized to one of three treatment arms: 1) standard therapy plus heparinization, 2) peripheral intravenous streptokinase therapy, and 3) intracoronary streptokinase therapy.

Progress: This study was terminated due to transfer of principal investigator.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-95-83 Status: Terminated

Title: Effect of Micronase on Glucose Control in Poorly Controlled Type II Diabetic Subjects on Insulin Therapy.

Start Date 30 Sep 84	Est Comp Date:
Principal Investigator Thomas J. Taylor, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators: James H. Anderson, Jr., M.D., LTC, MC
Key Words: Diabetes	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 12 Jul 84 Results Terminate

Objective(s): To determine if the addition of Micronase will improve the blood glucose control in Type II (maturity onset) diabetic subjects on insulin therapy but with poor control of blood glucose.

Technical Approach: None.

Progress: This protocol was terminated due to inability to obtain drug in a timely fashion.

Detail Summary Sheet

Date: 16 Oct 84 Proj No: C-1-84 Status: Completed

Title: Evaluation of a Totally Implantable Venous Access System.

Start Date 6 Dec 83	Est Comp Date:
Principal Investigator Walter H. Harvey, D.O., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: Kendall Reed, D.O., MAJ, MC Frederic A. Lombardo, Ph.D., CPT, MSC Glenn M. Mills, M.D., MAJ, MC James F. Boyd, M.D., LTC, MC
Key Words: Venous access system	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 14

Total Number of Subjects Enrolled to Date: 14

Date of Periodic Review _____ Results _____

Objective(s): To determine the characteristics of a totally implantable venous access system; to evaluate the procedure for implantation; to evaluate patient acceptance of the system; to evaluate morbidity especially infectious and thrombotic events; to evaluate the ease of blood withdrawal and chemotherapy administration; and comparison with Hickman/Broviac catheter system.

Technical Approach: Fourteen patients with leukemia with poor venous access had an implantable venous access system (Port-A-Cath--PC) inserted. Implantation was done under local anesthesia without complications.

Progress: Blood withdrawal via PC has been successful in all but one patient with CML-blast crisis who thrombosed his PC 72 hours post insertion. No infection due to PC has been encountered, although over 500 days with neutropenia have occurred in patients. Fifty plus gram postive, negative, and fungal septicemias, including staph aureus, staph epidermidis, E. coli, Klebsiella, pseudomonas, and candida have been successfully treated via PC. No chronic recurrent bacteremias due to PC have been encountered. Transfusions of red cells and platelets have been administered without problems.

Most standard chemotherapy agents, including high dose cytosine arabinoside and methotrexate; and antibiotics, including amphotericin, have been administered via PC without complication. The PC is flushed with heparinized solution after every blood withdrawal, but only with saline solution between administration of incompatible solutions. No systemic heparinization effects were noted with heparin flush solutions. No patient care of the PC is necessary, since it is totally implanted resulting in excellent patient acceptance.

Conclusions: The PC totally implantable venous access system has a low complication rate, especially infectious; blood withdrawal and agent administration is easy; and it is well tolerated by all age groups. Therefore, it is an excellent alternative to other indwelling catheter systems in leukemia patients.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-2-84 Status: Ongoing

Title: Left Ventricular Systolic Dynamics in Normal Man.

Start Date 6 Dec 83	Est Comp Date:
Principal Investigator Ares Pasipoularides, M.D., Ph.D.	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC Bernard H. Rubal, Ph.D., Ph.D. Jerry W. Miller, M.D., MAJ, MC Stuart Damore, M.D., MAJ, MC
Key Words: Ventricular systolic dynamics	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 10

Total Number of Subjects Enrolled to Date: 18

Date of Periodic Review _____ Results _____

Objective(s): To assess whether flow velocity-associate intraventricular pressure gradients represent a considerable intrinsic component of the total left ventricular systolic load when ejection is rapid, as in exercise.

Technical Approach: Intraventricular LV pressurs and flow velocities are obtained by Millar multisensor cath ers in subjects with normal LV function and no outflow obstruction, during routi e cardiac cathe, at rest and during sub-maximal exercise. Hemodynamic data and angriocardiographic measurements are applied to fluid dynamic analytical models of LV systolic dynamics, utilizing the HP 9830A computer.

Progress: We have been able to show that the intrinsic, inertial component of the total systolic LV load, reprsented by intraventricular gradients, can be considerable in early ejection even without outflow tract or valve pathology.

Detail Summary Sheet

Date: 24 Oct 84 Proj No: C-3-84 Status: Ongoing

Title: Determination of Left Ventricular Volume by Two-Plane Angiography: Correlation to Autopsy Left Ventricular Casts.

Start Date 6 Dec 83	Est Comp Date:
Principal Investigator(vice Anderson) Bernard J. Rubal, Ph.D.	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC Ares D. Pasipoularides, M.D., Ph.D. William E. Craig, M.D., LTC, MC
Words: Ventricular volume Angiography, two-plane	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 154.40

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): 1) To determine the best methodology for calculating left ventricular volume measurements for each of Brooke Army Medical Center's Cardiac Catheterization Laboratories.

2) To correlate calculated left ventricular volume measurements with left ventricular volumes from hearts obtained by autopsy.

3) To compare mathematical models for left ventricular volumes with single plane and biplane angiography and also by area length method and Simpson's rule method.

Technical Approach: The hearts from autopsy will be obtained by the usual methods at Brooke Army Medical Center. Atria, atrioventricular valves and papillary muscles will be removed and the coronary arteries perfused with a fixative solution. A latex solution will then be infused into the left ventricle under slight pressure and allowed to gel 24 to 48 hours. One incision will be made in each ventricular wall and the cast removed. Cineangiograms will be obtained for all casts in each of the Cardiac Catheterization Laboratories at BAMC.

Progress: Much difficulty has been encountered in obtaining the autopsy specimens. This problem has been alleviated, and the study will start in the near future.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-6-84 Status: Ongoing

Title: Treatment for Locally Advanced Non-Small Cell Lung Cancer: Radiation Therapy plus Cis-Platinum and VP-16, a Pilot Study.

Start Date 19 Dec 83	Est Comp Date:
Principal Investigator Gregory G. Friess, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: Walter H. Harvey, D.O., MAJ, MC James F. Boyd, M.D., LTC, MC Mudhad Baikadi, M.D., MAJ, MC
Key Words: Lung cancer, non-small cell	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 10

Total Number of Subjects Enrolled to Date: 10

Date of Periodic Review _____ Results _____

Objective(s): To assess the toxicity and response rate for combined chemotherapy plus radiation therapy in the initial treatment of locally advanced on-small cell lung cancer.

Technical Approach: Concurrent radiation therapy and chemotherapy are being given in Stage III, locally advanced, non-small cell lung cancer.

Progress: No excessive toxicity as a result of therapy has been noted. It is too early to assess response and survival.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-7-84 Status: Ongoing

Title: Evaluation of Continuous Infusion Vinblastine Sulfate and Concomitant Verapamil in Advanced Malignancy.

Start Date 19 Dec 83	Est Comp Date:
Principal Investigator W. E. Jordan, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Oncology	Associate Investigators: James F. Boyd, M.D., LTC, MC
Key Words: Verapamil	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 2

Total Number of Subjects Enrolled to Date: 2

Date of Periodic Review _____ Results _____

Objective(s): 1) To determine the resistance modifying effects of verapamil on tumors demonstrated to be resistant to vinblastine infusion.

2) To determine if there is enhanced toxicity from the addition of verapamil.

Technical Approach: Resistant malignancy is treated with Velban infusion for five days. If patients fails Velban, then Verapamil is added to the 5 day Velban infusion.

Progress: Two patients have been treated with one partial response. It is planned to register at least ten patients.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-8-84 Status: Ongoing

Title: IGA Nephropathy: A Prospective Evaluation.

Start Date 6 Feb 84	Est Comp Date:
Principal Investigator John B. Copley, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: David C. Tapp, M.D., CPT, MC
Key Words: IGA nephropathy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 1

Total Number of Subjects Enrolled to Date: 1

Date of Periodic Review _____ Results _____

Objective(s): To determine pathologic and clinical-pathologic criteria for the diagnosis of IGA nephropathy, the prognosis of patients with such a diagnosis and their suitability for continued military service, the extent of evaluation and degree of follow-up required for such patients, and the sensitivity and specificity of various noninvasive diagnostic techniques which potentially could obviate the necessity for renal biopsy.

Technical Approach: Patients must have biopsy proven IgA nephropathy. They are prospectively followed for evidence of renal deterioration and development of hypertension.

Progress: One patient has been enrolled at BAMC. Data will be presented at LAMC on patients from WRAMC, FAMC, and BAMC.

Detail Summary Sheet

Date: 29 Oct 84	Proj No: C-9-84	Status: Ongoing

Title: Primary Renal Hematuria: A Prospective Evaluation.

Start Date 6 Feb 84	Est Comp Date:
Principal Investigator John B. Copley, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: David C. Tapp, M.D., CPT, MC
Key Words: Hematuria, renal	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 5

Total Number of Subjects Enrolled to Date: 5

Date of Periodic Review _____ Results _____

Objective(s): To determine the etiology and significance of hematuria, microscopic or macroscopic, as well as prognosis in patients who have neither personal or family history of renal disease, nor evidence of systemic disease or extrarenal causes of hematuria.

Technical Approach: Patients are identified who have isolated hematuria, but no evidence of systemic disease and having normal renal function. Anatomical lesions are ruled out by IVP, cystoscopy and ± angiogram. Serological evaluation is done. Patient then has a renal biopsy. Patients are followed every six months to check on blood pressure and renal function to determine possible onset of renal disease. This is a prospective study and thus far no one has developed evidence of renal function deterioration.

Progress: Five patients have been biopsied and are currently being followed.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-10-84 Status: Ongoing

Title: Cytoxan (CTX) and ACTH Treatment in Chronic Progressive Multiple Sclerosis.

Start Date 6 Feb 84	Est Comp Date:
Principal Investigator David A. McFarling, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Neurology	Associate Investigators:
Key Words: Multiple sclerosis.	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 3

Total Number of Subjects Enrolled to Date: 3

Date of Periodic Review _____ Results _____

Objective(s): Stabilization or reversal of symptoms and signs of neurological dysfunction in patients with documented multiple sclerosis by the use of immunosuppressive medications.

Technical Approach: Patients with well-documented, progressive multiple sclerosis are admitted and, following baseline testing, administered a combination of cytoxan and ACTH. The cytoxan is discontinued once the WBC drops to $4x10^3$ or a total dosage of 100 mg/kg has been reached. Patients are discharged as soon as the WBC returns to $3x10^3$ and remains there for successive observations. Further follow-up and re-evaluation is done on an outpatient basis through the Neurology Clinic.

Progress: Of the three patients who have been entered in the protocol, one had to be withdrawn due to the development of a herpetic rash. The other two patients completed the protocol without complications and have been subsequently followed as outpatients. In both cases, the progression of symptoms has seemed to be less than prior to treatment but not dramatically so, and neither of the two patients has shown any signficant improvement.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-16-84 Status: Ongoing

Title: The Use of Monoclonal Antibodies to Classify Parapsoriasis.

Start Date 16 Mar 84	Est Comp Date:
Principal Investigator James H. Keeling, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Dermatology	Associate Investigators: Eric W. Kraus, M.D., LTC, MC Charles W. Lewis, M.D., COL, MC Donald E. Clemons, M.D., COL, MC Michael V. Mulvaney, M.D., CPT, MC Neil F. Haddock, M. D., CPT, MC
Key Words: Monoclonal antibodies Parapsoriasis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To compare the cellular infiltrates of small plaque parapsoriasis with that of large plaque parapsoriasis to ascertain whether differences are present and useful in separating the two diseases and their subsequent clinical course.

Technical Approach: Patients will be divided into two populations: those with large plaque parapsoriasis and those with small plaque/benign parapsoriasis. The study will require that an additional biopsy be taken at the time of routine follow-up. The additional biopsy will be assayed for the presence of cell types with a variety of specific monoclonal antibodies.

Progress: Lack of funding has precluded purchase of required monoclonal reagents. This problem has been resolved and the study will start in the near future.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-18-84 Status: Ongoing

Title: Congestive Cardiomyopathy: Evaluation of Transvenous Myocardial Biopsy and Treatment with an Anti-Inflammatory Regimen.

Start Date 16 Mar 84	Est Comp Date:
Principal Investigator Ricky D. Latham, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators:
Key Words: Cardiomyopathy, congstive	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 7

Total Number of Subjects Enrolled to Date: 7

Date of Periodic Review _____ Results _____

Objective(s): To assess the efficacy of using amendomyocardial biopsy technique in the diagnosis and management of congestive cardiomyopathy by identifying specific etiologies and/or those patients with an inflammatory cellular reaction.

Technical Approach: Patients undergo complete noninvasive assessment with laboratory echocardiogram, MUGA, and Gallium. Then, if eligible, endomyocardial biopsy is performed. NIH interprets the histology and Hahnemann University does immunological assessment. Patients must have cath proven normal coronary arteries. Patients should be randomized to Prednisone and noninvasive studies repeated in 6 months, 12 months, and 18 months.

Progress: Seven patients have received initial evaluation and two are scheduled to return. Another patient is scheduled for biopsy and two others are being evaluated. No complications have been encountered.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-19-84 Status: Ongoing

Title: Dypyridamole MUGA Studies Compared with Quantitative Tomographic Stress and Dypyridamole Infusion TL201 Scintigrams for Assessing Coronary Artery Disease.

Start Date 16 Mar 84	Est Comp Date:
Principal Investigator Ricky D. Latham, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Michael Cawthon, M.D., CPT, MC Michael F. Hartshorne, M.D., MAJ, MC Joseph P. Murgo, M.D., COL, MC
Key Words: Coronary artery disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 24

Total Number of Subjects Enrolled to Date: 24

Date of Periodic Review _____ Results _____

Objective(s): To assess the sensitivity of dypyridamole MUGA study as compared to dypyridamole infusion TL 201 studies to detect significant coronary artery disease.

Technical Approach: IV Persantine, 60 mg/kg, is given over 4 minutes. TL^{201} is given 2 minutes after infusion. For MUGA, TCM^{99} is given and rest study performed before infusion. Studies are then done at 3 minute intervals x 4. All patients are submitted to cardiac catheterization and results of anatomy are determined.

Progress: Preliminary results reveal IV Persantine MUGA tests have a sensitivity of .80 and specificity of .85 predicting coronary artery diease. Complications are minimal with headache most common side effect. No nausea has been reported.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-20-84 Status: Ongoing

Title: Evaluation of Amiodarone for the Therapy of Cardiac Arrhythmias.

Start Date 16 Mar 84	Est Comp Date
Principal Investigator Richard A. Schatz, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Joseph P. Murgo, M.D., COL, MC
Key Words: Arrhythmias, cardiac	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 4

Total Number of Subjects Enrolled to Date: 4

Date of Periodic Review _____ Results _____

Objective(s): To control symptomatic cardiac arrhythmias which have been unresponsive to conventional and accepted forms of treatment, or whose control is dependent upon the use of a drug which has been shown to be harmful to, or in other ways not tolerated by, the individual.

Technical Approach: Patients who have failed conventional drug therapy for cardiac arrhythmias are eligible for the study. Patients are followed regularly with Holter monitors to judge success of therapy.

Progress: Four patients entered on the study have experienced good response to therapy without side effects.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-21-84 Status: Ongoing

Title: Effects of Long-Acting Propranolol and Nifedipine on Renal Blood Flow and Glomerular Filtration Rate in Patients with Hypertension.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Charles J. Foulks, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: Jeffery F. Addison, M.D., CPT, MC
Key Words: Hypertension	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review _____ Results _____

Objective(s): 1) To show whether Inderal LA is associated with short-term or long-term decreases in renal blood flow and/or glomerular filtraiton rate.

2) To show whether Nifedipine, a calcium-channel blocker with vasodilator properties, effects a change in renal blood flow and/or glomerular filtration rate when added to Inderal LA therapy in the treatment of hypertension.

Technical Approach: Patients seen in the BAMC Hypertension Clinic and in the Renal Clinic with a diagnosis of essential hypertension determined by three separate blood pressure measurements on three separate occasions are eligible for the study. Each patient will undergo a radionuclide hippuran study to determine effective renal plasma flow and a Glofil study to determine glomerular filtration rate. Patient will then be placed on Inderal. When blood pressure has stabilized at $\geq$ 110 and the pulse is $<$ 70/minute, Nifedipine will be added.

Progress: This study has not been started.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-22-84 Status: Ongoing

Title: Effect of Oral Calcium Carbonate on Serum Phosphate in Chronic Renal Insufficiency and ESRD.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Charles J. Foulks, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: Jeffery F. Addison, M.D., CPT, MC
Key Words: Chronic renal insufficiency ESRD	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 21

Total Number of Subjects Enrolled to Date: 21

Date of Periodic Review _____ Results _____

Objective(s): 1) To demonstrate whether or not oral calcium carbonate therapy with food ingestion results in control of serum phosphate in patients with chronic renal insufficiency (Ccr $\leq$ 30 cc/minute) and ESRD without concomitant use of traditional phosphate binders.

2) To show whether serum aluminum levels decrease after implementation of the first objective.

Technical Approach: After discontinuing aluminum containing phosphate binders, the patients are given oral calcium carbonate in increasing doses to control phosphate. Calcium and phosphate levels are monitored.

Progress: After four months of therapy with oral calcium carbonate, preliminary results show no significant differences in control of serum phosphate between aluminum-containing phosphate binders and calcium carbonate. There have been no significant side effects or hypercalcemia.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-23-84 Status: Ongoing

Title: Relationship of Orthostatic Vital Signs and Extracellular Volume in Euvolemic and Hypovolemic Adult Patients.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Howard Cushner, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: Charles J. Foulks, M.D., MAJ, MC Michael F. Hartshorne, M.D., MAJ, MC John B. Copley, M.D., LTC, MC
Key Words: Orthostatic vital signs Extracellular volume	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 15

Total Number of Subjects Enrolled to Date: 17

Date of Periodic Review _____ Results _____

Objective(s): To define the relationship between various degrees of volume depletion and changes in mean arterial pressure and pulse from the supine to standing position.

Technical Approach: All patients accepted for study will be weighed and their blood pressure and pulse will be taken supine and then every minute for five minutes while standing. If the vital signs are abnormal, the following blood and urine studies will be done.

A. Blood for BUN, creatinine, glucose, Na^+, K^+, Cl^-, CO_2, uric acid, albumin (Pa 20) and CBC
B. Urine for Na^+, K^+, Cl, BUN, osmolality, creatinine, and a microscopic examination.

Progress: Orthostatic values in normal euvolemic patients have been assessed. The metabolic ward (Clinical Research Center) will be used for future study of the patients.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-27-84 Status: Ongoing

Title: Treatment of Graves' Ophthalmopathy with Cyclosporin. (Collaborative Study with WRAMC)

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Thomas J. Taylor, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Endocrinology	Associate Investigators: Leonard Wartofsky, M.D., COL, MC, WRAMC
Key Words: Graves' Ophthalmopathy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To assess the efficacy of Cyclosporin treatment on the ophthalmopathy of Graves' Disease.

Technical Approach: The study will be composed of a random cross-over design comparing Cyclosporin treatment to the most commonly employed current therapy, high dose oral prednisone.

Progress: No patients have been entered on the study.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-28-84 Status: Ongoing

Title: Intravenous Pulmonary Angiography Utilizing Digital Subtraction Angiography - A Comparison to Standard Pulmonary Angiography.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator David S. Gantt, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Steven R. Bailey, M.D., MAJ, MC William E. Craig, M.D., LTC, MC Michael J. Huggins, M.D., MAJ, MC Bernard J. Rubal, Ph.D. Joseph P. Murgo, M.D., COL, MC
Key Words: Subtraction angiography Pulmonary angiography	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 4

Total Number of Subjects Enrolled to Date: 4

Date of Periodic Review _____ Results _____

Objective(s): To demonstrate optimal technique of single plane and biplane intravenous digital angiography for visualization of pulmonary arteries and pulmonary arterial emboli.

Technical Approach: Each patient receives three different injections in either the pulmonary artery, right atrium, or brachial vein of different contrast dosages to compare images obtained. In addition, when indicated, a standard pulmonary angiogram is compared to the digital images obtained.

Progress: Digital pulmonary angiograms can be accomplished with dye loads as small as 4 to 6 cc of contrast agent; with comparison to standard pulmonary angiography, qualitatively similar pictures can be obtained with dye loads of one-third or less than those used in standard techniques.

Detail Summary Sheet

Date: 29 Oct 84	Proj No: C-31-84	Status: Ongoing

Title: Comprehensive Evaluation of Sexual Function in Male Patients with End-Stage Renal Disease (ESRD).

Start Date 10 May 84	Est Comp Date:
Principal Investigator Charles J. Foulks, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: Alan Hopewell, Ph.D.
Key Words: End-stage renal disease (ESRD)	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review _____ Results _____

Objective(s): To define the pathophysiology of impotence in male patients undergoing therapy for ESRD with primary emphasis upon the contribution of hyperprolactinemia to the impotence.

Technical Approach: All patients selected for study will undergo a history and physical examination as well as neurological examination; chemistry profile; CBC with differential; PA and lateral chest x-ray; nerve conduction velocity; prolactin, FSH, LH, testosterone; MMPI; sexual history questionnaire of patient and spouse; and other studies as outlined in the protocol.

Progress: Hyperprolactinemic impotent patients have not been identified. It seems our population is too small.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-32-84 Status: Ongoing

Title: Effect of Discontinuance of Smoking on Gastroesophageal Reflux.

Start Date 10 May 84	Est Comp Date:
Principal Investigator Fred Goldner, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Gastroenterology	Associate Investigators:
Key Words: Gastroesophageal reflux	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review _____ Results _____

Objective(s): To determine if discontinuance of cigarette smoking will decrease gastroesophageal reflux in a population of smokers with pyrosis.

Technical Approach: Ambulatory 24 hour pH monitoring technology will be applied to a group of smoking patients with pyrosis before and after discontinuance of smoking. A standard set of criteria will e applied to determine if the discontinuance of smoking has a significant effect on gastroesophageal reflux.

Progress: The ambulatory pH monitoring system (MEDCASE) approved for purchase under this project has not yet been acquired. The project will begin immediately upon receipt of this itme.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-36-84 Status: Ongoing

Title: Evaluation of the Photoprotective Abilities of the Army Caps Currently Recommended for Army Personnel Head Cover.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator Eric W. Kraus, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Dermatology	*Associate Investigators:* James H. Keeling, M.D., MAJ, MC Madhu A. Pathak, M.D. Arthur J. Sober, M.D.
Key Words: Army caps	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 8

Total Number of Subjects Enrolled to Date: 8

Date of Periodic Review _____ Results _____

Objective(s): 1) To test the photoprotective abilities of two US Army head caps currently used by Army personnel.

2) To determine to what extent the two US Army head caps minimize the impinging effects of solar UV radiation on the face and neck.

Technical Approach: Outdoor testing using natural sunlight, each volunteer had a vertical and horizontal UVB intensity reading done at 20 sites on the head and neck under three different conditions - no hat, wide brim hat, and BDU cap. an IL 700 radiometer and a Robertson-Berger meter were used to measure intensity.

Progress: Wide brim tropical hat was statistically more protective than the standard Army fatigue (BDU) cap at the ears and posterior neck sites. At all other sites tested the tropical hat was at least as protective as the BDU cap.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-37-84 Status: Ongoing

Title: Clinical Trial of Ipratropium Bromide (Atrovent [R]) in Patients with Refractory Asthma and/or Chronic Obstructive Pulmonary Disease.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator Herman M. Blanton, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Pulmonary Dis.	Associate Investigators:
Key Words: Asthma, refractory Chronic obstructive pulmonary disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 5

Total Number of Subjects Enrolled to Date: 5

Date of Periodic Review _____ Results _____

Objective(s): To provide emergency medication for patients who do not respond to currently marketed medications.

Technical Approach: Eligible patients must have a diagnosis of bronchial asthma, chronic bronchitis, or emphysema. Inhalations should not exceed 12 per day.

Progress: This protocol was instituted initially to obtain the drug, Atrovent, for a patient with severe asthma unresponsive to standard medical therapy. To date four additional patients with refractory bronshospastic COPD have begun receiving the drug. Results have been good with an average increase of about 15% in the RBV_1 on post-drug testing. No significant side effects have been noted.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-43-84 Status: Ongoing

Title: Assessment of Radiocontrast Induced Acute Renal Failure Following Coronary Angiography: An Evaluation of Intravenous Mannitol Infusion as a Preventive Measure.

Start Date 17 Jul 84	Est Comp Date:
Principal Investigator John R. Krouse, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Steven Bailey, M.D., MAJ, MC Don Hammonds, M.D., CPT, MC Brian Copley, M.D., LTC, MC
Key Words: Angiography, Coronary Renal failure	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 7

Total Number of Subjects Enrolled to Date: 7

Date of Periodic Review _____ Results _____

Objective(s): To determine the incidence of radiocontrast-induced acute renal failure in a high risk subgroup following selective cardiac angiography, to determine the effects of hemodynamic status on this incidence, and to compare the effect of intravenous mannitol infusion following angiography as compared to placebo on the incidence of development of acute renal failure.

Technical Approach: Patients with renal failure (creatinine > 2.0) or diabetes mellitus requiring treatment were randomized to receive either mannitol or saline at catheterization. Renal function was followed closely before and after catheterization to assess differences in development of renal failure.

Progress: It is too early to report any significant findings.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-44-84 Status: Ongoing

Title: Hematuria as a Complication of Anticoagulation.

Start Date 17 Jul 84	Est Comp Date:
Principal Investigator David C. Tapp, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Nephrology	Associate Investigators: John C. Copley, M.D., LTC, MC Steven R. Bailey, M.D., MAJ, MC C. Ritchie Spence, M.D., COL, MC William S. Grabowski, M.D., COL, MC Joseph P. Murgo, M.D., COL, MC
Key Words: Hematuria Anticoagulation	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 1

Total Number of Subjects Enrolled to Date: 1

Date of Periodic Review _____ Results _____

Objective(s): To determine the incidence of hematuria in patients on various anticoagulants; specifically coumadin, heparin, and streptokinase; and then to identify the specific etiology of the hematuria by employing selected diagnostic tests (IVP, cystoscopy, etc.).

Technical Approach: Patients with hematuria on coumadin, heparin, streptokinase are identified and then receive a work-up to determine etiology (IVP, cystogram, culture, PPD, serologies).

Progress: So far, one patient has been identified with hematuria and work-up is in progress.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-47-84 Status: Terminated

Title: Field Trial - Comparing the Effectiveness of Two Different Types of Army Head Coverings in Preventing Sunburn.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Eric W. Kraus, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Dermatology	Associate Investigators: James H. Keeling, M.D., MAJ, MC
Key Words: Army head covering	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 19

Total Number of Subjects Enrolled to Date: 19

Date of Periodic Review _____ Results _____

Objective(s): To see if use of different hats in a field situation correlates with results measured in static situations.

Technical Approach: This study was designed using volunteers from participants at the Combat Casualty Care Course held at Camp Bullis, TX.

Progress: It was determined that in this setting there were too many uncontrolled variables to make this field test reliable. Therefore, the study was terminated.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-48-84 Status: Ongoing

Title: The Subjective Assessment of the Effectiveness of Esophageal Dilation.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Andrew Bailey, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Gastroenterology	Associate Investigators: Frank P. Wilson, D.O., LTC, MC Fred Goldner, M.D., COL, MC
Key Words: Esophageal dilation	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 6

Total Number of Subjects Enrolled to Date: 6

Date of Periodic Review _____ Results _____

Objective(s): To assess subjectively the effectiveness of esophageal dilation.

Technical Approach: Esophageal dilatation utilizing Maloney dilators is observed under fluoroscopy. The physician performing dilation and the patient being dilated are unaware of the fluoroscopic findings. The physician attempts to assess the effectiveness of dilation without aid of the fluoroscopic findings. These results are then correlated with the fluoroscopic findings.

Progress: The study has progressed smoothly to this point. No complications have been encountered.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-49-84 Status: Ongoing

Title: A Test of the Colonic Hyperalgesia Hypothesis in Patients with Irritable Bowel Syndrome (IBS).

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Fred Goldner, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Gastroenterology	Associate Investigators: John B. Powell, Ph.D., CPT, MSC
Key Words: Irritable bowel syndrome (IBS)	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review _____ Results _____

Objective(s): To determine if abdominal pain in patients with IBS is due to a hypersensitivity of the colon to distention versus a hypersensitivity of the patient to pain in general.

Technical Approach: Noxious stimuli will be applied in a controlled manner to a group of irritable bowel patients with abdominal pain. Gut distention pain will be evaluated by balloon distentionof the rectum and somatic discomfort tested by cold water hand immersion. Control and IBS populations will be compared as to pain sensitivity in each parameter.

Progress: Due to scheduling difficulties of the principal investigator, the study has not been started. However, it is anticipated that the first patients will be enrolled shortly.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-50-84 Status: Ongoing

Title: The Effect of Weight Loss on Gastroesophageal Reflux.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Fred Goldner, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Gastroenterology	Associate Investigators:
Key Words: Gastroesophageal reflux	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review _____ Results _____

Objective(s): To determine if weight loss achieved through caloric restriction will improve gastroesophageal reflux of acid.

Technical Approach: 24-hour ambulatory pH testing will be performed on a group of obese subjects with pyrosis, before and after weight loss. A standard set of reflux criteria will be applied to determine if weight loss affects the degree of gastroesophageal reflux.

Progress: The ambulatory pH monitoring system (MEDCASE) approved for purchase under this project has not been acquired. The project will begin immediately upon receipt of this item.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-51-84 Status: Ongoing

Title: Incidence of Cardiac Arrhythmias During Labor and Delivery.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator David S. Gantt, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Charles Jeffries, M.D., CPT, MC
Key Words: Arrhythmias, cardiac	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 14

Total Number of Subjects Enrolled to Date: 14

Date of Periodic Review _____ Results _____

Objective(s): To document the incidence of cardiac conduction abnormalities and arrhythmias during normal labor and delivery in healthy women.

Technical Approach: A 24 hour Holter monitor is placed and recordings obtained during labor, delivery, and approximately 12 hours post-delivery.

Progress: There is a significant incidence of atrial arrhythmia, and to date one episode of ventricular arrhythmia. Interestingly, no episodes of vagal induced AV block have been recorded.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-52-84 Status: Ongoing

Title: Hemodynamics of Supine versus Upright Bicycle Ergometry: A Comparison.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator David S. Gantt, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Julio J. Bird, M.D., MAJ, MC Bernard J. Rubal, Ph.D., Ph.D. Joseph P. Murgo, M.D., COL, MC
Key Words: Ergometry	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 7

Total Number of Subjects Enrolled to Date: 7

Date of Periodic Review _____ Results _____

Objective(s): To compare hemodynamic parameters at rest and during bicycle ergometry in both upright and supine positions.

Technical Approach: With high fidelity micromanometer tipped catheters in the left and right heart, hemodynamic measurements are obtained both in the supine and upright position, at rest and during exercise.

Progress: There is a significant drop in right-sided pressures in the upright position, while on the left side only a small difference is recorded. Pulmonary impedance may still change significantly, while it is questionable whether aortic impedance does so.

Detail Summary Sheet

Date: 30 Oct 84	Proj No: C-61-84	Status: Completed

Title: Common Bile Duct Obstruction with Gallstones Causing Transient Marked Elevations of Serum Transaminases and LDH, Simulating Hepatocellular Injury.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Eddie C. Starnes, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Gastroenterology	Associate Investigators: Christopher T. Shaw, M.D., MAJ, MC
Key Words: Obstruction, common bile duct	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): A retrospective study to establish the frequency of common bile duct stones presenting with marked elevation of serum transaminases and LDH which simulates a hepatocellular injury pattern.

Technical Approach: Retrospective study in which all charts were reviewed for a 12 month period which were signed out with a compatible diagnosis (such as cholecystectomy, CBD exploration, choledocholithiasis, obstruction of CBD, etc.). Charts were selected for study in which obstruction of the common bile duct presented with serum transaminases greater than or equal to 600. Method of confirmation of diagnosis was recorded; i.e., surgery, ERCP, PTC, etc.

Progress: A total of five acceptable cases were found at BAMC and combined with a similar study at Medical College of Georgia. Nine patients with choledocholithiasis or cholelithiasis who developed transient elevations of serum SGOT levels of greater than 600 units are presented. Familiarity with this prsentation of extrahepatic biliary obstruction is needed to prevent an unnecessary evaluation of a primary hepatocellular disorder.

C-61-84 (continued)

The following conclusions regarding extrahepatic biliary disease and marked elevation of SGOT are made: 1) The SGOT level rises and declines rapidly within a 24-72 hour period. 2) Higher SGOT levels are seen in patients with choledocholithiasis if the gallbladder has been removed. 3) In patients with choledocholithiasis, a fall in SGOT levels does not necessarily mean the stone has passed.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-64-84 Status: Ongoing

Title: Utilization of Mixed Venous Oxygen Saturation (Sv_2 Sat) in the Management of the Critically Ill.

Start Date 13 Sep 84	Est Comp Date:
Principal Investigator David S. Glendening, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Pulmonary	Associate Investigators: Joseph I. Matthews, M.D., COL, MC
Key Words: Opticath	Bruce A. Bush, M.D., MAJ, MC Herman M. Blanton M.D., CPT, MC
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): 1) To determine if continuous SvO_2 monitoring reduces numbers of other evaluative tests/procedures in the managemennt of the critically ill.

2) To determine if continuous SvO_2 monitoring affects the duration of vasoactive drug therapy or mechanical ventilatory assistance.

3) To dtermine if insertion failures or procedure complications vary between catheters or indications.

Technical Approach: Information will be gathered regarding the effectiveness of a new catheter, called an Opticath, in the care of the seriously ill patient.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84	Proj No: C-73-84	Status: Ongoing

Title: Comparison of Micromanometer Tip Left Atrial Catheter Monitoring with Fluid Pulmonary Artery Pressure Monitoring in Postoperative Open Heart Surgery Patients, a Trend Analysis in the SICU.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator William E. Craig, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Julio J. Bird, M.D., MAJ, MC Joseph P. Murgo, M.D., COL, MC Ricky D. Latham, M.D., CPT, MC Harold D. Head, M.D., COL, MC Bernard J. Rubal, Ph.D.
Key Words: Catheter, left atrial	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To compare the pressures obtained from a high fidelity, micromanometer transducer mounted on a left atrial catheter to those obtained from a flow-directed, balloon-tipped catheter in the pulmonary artery in patients recovering from open heart surgery.

Technical Approach: At the time of surgery, a micromanometer tip left atrial catheter will be inserted through the pulmonary vein into the atrium. A flow-directed, balloon-tipped catheter will be inserted into the pulmonary artery in the routine manner. Pressure and blood gas measurements will be recorded at two hour intervals or more often if indicated. Analysis will continue until the catheters are removed.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-74-84 Status: Ongoing

Title: Hemodynamic Effects of IV Dipyridamole in Normal Man Compared with Patients with Significant Arteriosclerotic Heart Disease.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator Romel C. Wrenn, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Medicine/Cardiology	Associate Investigators: Ricky D. Latham, M.D., CPT, MC Joseph P. Murgo, M.D., COL, MC
Key Words: Dipyridamole, IV	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To establish the acute effect of IV dipyridamole in normal subjects on cardiovascular hemodynamics routinely measured in the cardiac catheterization laboratory.

Technical Approach: Patients scheduled for elective cardiac catheterization will be asked to participate. Cardiac catheterization will be performed in the standard fashion. All hemodynamics will be measured at control, during infusion of dipyridamole, and at two-minute intervals up to 10 minutes post-infusion. Baseline Fick and thermal dilution cardiac outputs will be obtained. Thermal dilution cardiac outputs will be used in post-infusion studies.

Progress: This is a new study.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-29-84 Status: Ongoing

Title: Women's Descriptions of the Impact of Their Husbands' Debilitating Illnesses (Cancer) on Their Important Roles.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Annette Etnyre, R.N., CPT, ANC	Facility Brooke Army Medical Center
Dept/Svc UTHSC San Antonio, School of Nursing	Associate Investigators: Peggy Richardson, R.M., Ph.D.
Key Words: Debilitating illness	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 14

Total Number of Subjects Enrolled to Date: 14

Date of Periodic Review_____ Results_____

Objective(s): To examine the impact of a husbands' devilitating illnesses on women's assessments and evaluations of their important roles and role resposibilities.

Technical Approach: Women were invited to participate after discussing the study with their husbands who were either hospitalized or being seen in the outpatient clinic. The subjects were interviewed by the principal investigator for approximately 1-2 hours using a semi-structured interview guide.

Progress: Fifty-three "most important" roles were identified. For women < 50 years of age, the ranked importance given roles changed with husband's illness. Fifty percent of the women stated that their role responsibilities had changed "a lot" since the husband's illness. Sixty-seven percent of the roles that changed had increased demands. Forty-six percent of all roles changed; 54% remained stable. Sixty percent of roles were those of wife and mother, thus major energies are invested in the family. None of the women felt they were not dealing well with their present roles.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-35-84 Status: Ongoing

Title: The Effects of Perceived Changes in Important Relationships on Expectations for Recovery During a Gynecologic Cancer Illness.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator Linda Yoder, R.N., CPT, ANC	Facility Brooke Army Medical Center
Dept/Svc Department of Nursing	Associate Investigators: Peggy Richardson, R.N., Ph.D.
Key Words: Gynecologic cancer	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 12

Total Number of Subjects Enrolled to Date: 12

Date of Periodic Review _____ Results _____

Objective(s): To determine how the gynecologic cancer patient's expectations for recovery are affected by her perceptions of change in relationships with important others during her illness.

Technical Approach: Twelve gynecologic cancer patients have been interviewed using the interview tool described in the protocol.

Progress: No analysis of data has been completed at this time.

Detail Summary Sheet

Date: 1 Nov 84 Proj No: C-58-82 Status: Terminated

Title: The Study of Hormonin® in the Management of Postmenopausal Symptoms.

Start Date 23 Aug 82	Est Comp Date:
Principal Investigator Charles S. Foreman, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecology	Associate Investigators: C. Neil Herrick, M.D., COL, MC
Key Words: Postmenopausal symptoms	Andrew W. Robertson, M.D., CPT, MC
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 37

Total Number of Subjects Enrolled to Date: 37

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To evaluate the comparative short-term efficacy and safety of different Hormonin® dosages for the treatment of postmenopausal symptoms in both naturally and surgically menopausal women.

Technical Approach: Patients age 30-65, naturally or surgically menopausal, were studied. They were assigned to one of three groups and given one of three dose levels of Hormonin or Premarin or placebo. Endometrial biopsy was obtained at the first and last visit.

Progress: The principal investigators are no longer assigned to BAMC. No information is available as to the outcome of the study.

Detail Summary Sheet

Date: 1 Nov 84	Proj No: C-1-83	Status: Completed

Title: Preinduction Cervical Softening with PGE_2 by Administration onto the Vaginal Portion of the Cervix.

Start Date 8 Nov 82	Est Comp Date:
Principal Investigator Roger L. Wallace, D.O., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecology	Associate Investigators: C. Neil Herrick, M.D., COL, MC
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: 15

Date of Periodic Review _____ Results _____

Objective(s): 1) To determine if PGE_2 in a gel formulation is effective in improving cervical induction features following administration vaginally directly only the portio vaginalis.

2) To establish the optimal dose in terms of efficacy and side effects.

Technical Approach: This was a collaborative study with UTHSCSA and was a blinded, placebo-controlled study. Measures of outcome include change in Bishop's score of cervix, ease of induction of labor, and number of patients delivering vaginally vs. cesarean section.

Progress: Data obtained from this study has been submitted to the University of Texas Health Science Center for analysis.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-6-83	Status: Ongoing

Title: Intravenous Piperacillin Sodium vs Penicillin-G in Combination with Gentamicin Sulfate and Clindamycin for Postoperative Gynecological and Postpartum Infections.

Start Date 10 Nov 82	Est Comp Date:
Principal Investigator (vice Mark) Averell H. Sutton, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecology	Associate Investigators:
Key Words: Infection, postpartum Infection, gynecological	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 29

Total Number of Subjects Enrolled to Date: 29

Date of Periodic Review 9 Mar 84 Results Continue

Objective(s): To compare with clinical efficacy and cost of a new semi-synthetic Penicillin (Piperacillin) used alone versus that of Penicillin-G, Gentamicin Sulfate, and Clindamycin.

Technical Approach: When a potential study patient became febrile, she was evaluated by the operating surgeon (resident) or by the resident on duty at night. Routine laboratory evaluation included an initial CBC, urine culture, urinalysis, blood cultures, serum creatinine, indirect Coomb's, liver functions and cultures from abscess fluid or peritoneal fluid or uterine washings it possible or appropriate. Peak and trough levels of gentamicin and piperacillin were obtained when appropriate and indicated. Selected patients were treated with either 5 million units of aqueous penicillin-G every 6 hours plus gentamicin every 8 hours or piperacillin alone every 6 hours.

Progress: Twelve patients were assigned to the piperacillin group and seventeen to the penicillin-gentamicin group. Ten of twelve patients treated with piperacillin were considered therapeutic successes. Twelve of seventeen patients on penicillin and gentamicin had resolution of symptoms after adding clindamycin. Fifteen of seventeen patients were coded as treatment successes.

Preliminary evaluation indicates that piperacillin may be as effective as penicillin and gentamicin therapy for gynecological/obstetrical infections as well as being less toxicity.

Detail Summary Sheet

Date: 1 Nov 84 Proj No: C-18-83 Status: Ongoing

Title: A Double Blind Comparative Study of Ritodrine vs Terbutaline on Arresting Premature Labor.

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator George Jirak, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecology	Associate Investigators: Roger L. Wallace, D.O., LTC, MC
Key Words: Premature labor	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date: 48

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To compare the effectiveness of two beta-2 specific receptor agonists on arresting premature labor.

Technical Approach: Ritodrine or Terbutaline are administered in a blinded fashion to randomized patients in premature labor. Measures of outcome include delay of delivery by 48 hours. Observation of side effects include: incidence of maternal/fetal tachycardia, hypotension, tremor, headache, etc., need for discontinuation of therapy secondary to side effects.

Progress: More patients must be enrolled in the study before any data can be reported.

Detail Summary Sheet

Date: 1 Nov 84 Proj No: C-50-83 Status: Ongoing

Title: A Survey of Women Concerning Their Labor and Delivery Experiences.

Start Date 16 Jun 83	Est Comp Date:
Principal Investigator Roger L. Wallace, D.O., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecology	Associate Investigators:
Key Words: Delivery experiences Birthing room	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date: 91

Date of Periodic Review n/a Results

Objective(s): 1) To describe the demographic characteristics of women utilizing the labor, delivery, and recovery care facilities at BAMC from Oct 1982 thru May 1983.

2) To identify women's thoughts and feelings about their labor, delivery, and recovery experiences.

3) To determine the differences between women who use traditional labor and delivery care facilities and women who use birthing room facilities.

Technical Approach: Information is obtained retrospectively through questionnaires. Initial information gathered is to attempt to determine: how well women are prepared for childbirth (perceptions of the real-life event vs. expectations) and what effect does formal childbirth preparation (i.e. Lamage) have on the process. Part three of the objectives will be assessed in a prospective fashion.

Progress: The preliminary data are currently under evaluation.

Detail Summary Sheet

Date: 1 Nov 84 Proj No: C-11-84 Status: Ongoing

Title: Rapid Diagnosis of Vaginal Candidiasis.

Start Date 13 Mar 84	Est Comp Date:
Principal Investigator (vice Hume) Phyllis F. Yohe, D.O., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecology	Associate Investigators: James M. Mullins, M.D., CPT, MC Gordon O. Downey, M.D., MAJ, MC
Key Words: Candidiasis, vaginal	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date: 100

Date of Periodic Review Results

Objective(s): To develop a prototype assay to diagnose vaginal candidiasis.

Technical Approach: Patients with a clinical diagnosis of vaginal candidiasis are enrolled in the study. Vaginal cultures are sent to UTHSCSA for capsular antigen identification and for use in developing a rapid diagnostic test for vaginal candidiasis in conjunciton with work done by Dr. Mark Weiner, UTHSC.

Progress: No reportable data are available at this time.

Detail Summary Sheet

Date: 1 Nov 84 Proj No: C-24-84 Status: Completed

Title: Evaluation of the Efficacy of the Masterson Aspirator for Endometrial Biopsy.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Bruce Rajala, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecolgy	Associate Investigators: Ralph Boling, M.D., CPT, MC Gordon Downey, M.D., MAJ, MC
Key Words: Masterson aspirator	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 50

Total Number of Subjects Enrolled to Date: 50

Date of Periodic Review _____ Results _____

Objective(s): To examine the efficacy of a new instrument (Masterson Aspirator) for endometrial biopsy.

Technical Approach: The ability to obtain endometrial tissue with a new biopsy instrument was tested at the time of hysterectomy in anesthetized patients. Adequacy of tissue for diagnosis was assessed by Pathology.

Progress: Fifty patients comprised the study group. Biopsy was found to be adequate in 47 of the 50 patients studied.

Detail Summary Sheet

Date: 1 Nov 84 Proj No: C-46-84 Status: Ongoing

Title: The Evaluation of the Efficacy of the Masterson Aspirator in Outpatient Endometrial Biopsy.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Ralph Boling, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Obstetrics-Gynecology	Associate Investigators: Bruce Rajala, M.D., CPT, MC Gordon Downey, M.D., MAJ, MC
Key Words: Masterson aspirator	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To examine the efficacy of a new instrument (Masterson Aspirator) for outpatient endometrial biopsy.

Technical Approach: The Masterson aspirator is compared to the Novak biopsy curette in outpatient endometrial biopsy. Patients are randomized to attempted biopsy with either instrument and failure to obtain tissue is treated by D&C.

Progress: This is a new study. No patients have been enrolled.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-64-83 Status: Ongoing

Title: In vitro Demyelination and Remyelination of Cultured Mammalian Central Nervous Tissue.

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator Roby P. Joyce, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pathology	Associate Investigators: Debra J. Krikorian, Ph.D., CPT, MSC
Key Words: Mammalian central nervous tissue	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 3,600.71

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To establish the capability of studying demyelination and remyelination of mammalian central nervous tissue in vitro at Brooke Army Medical Center.

Technical Approach: Myelinated neuronal cultures will be exposed to EAE sera to investigate the process of demyelination at the EM level. The EAE sera will be removed and remyelination observed at the EM level in vitro.

Progress: At present we are able to consistently grow and maintain mammalian neurons. The in vitro growth and maintenance of oligodendrocytes continues to be a major obstacle. Without adequate growth of oligodendrocytes, myelination of the neuronal axons cannot occur. Review of the literature has provided us with new ideas for modifying the tissue culture media and techniques which should favor the growth of oligodendrocytes without interfering with neuronal survival.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-4-84 Status: Ongoing

Title: In vivo Efficacy of Frozen Platelets.

Start Date 19 Dec 83	Est Comp Date:
Principal Investigator Roby P. Joyce, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pathology	Associate Investigators: Glenn M. Mills, M.D., MAJ, MC Michael F. Hartshorne, M.D., MAJ, MC Robert C. Allen, M.D., Ph.D., MAJ, MC Duane Broussard, M.D., CPT, MC
Key Words: Platelets, frozen	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

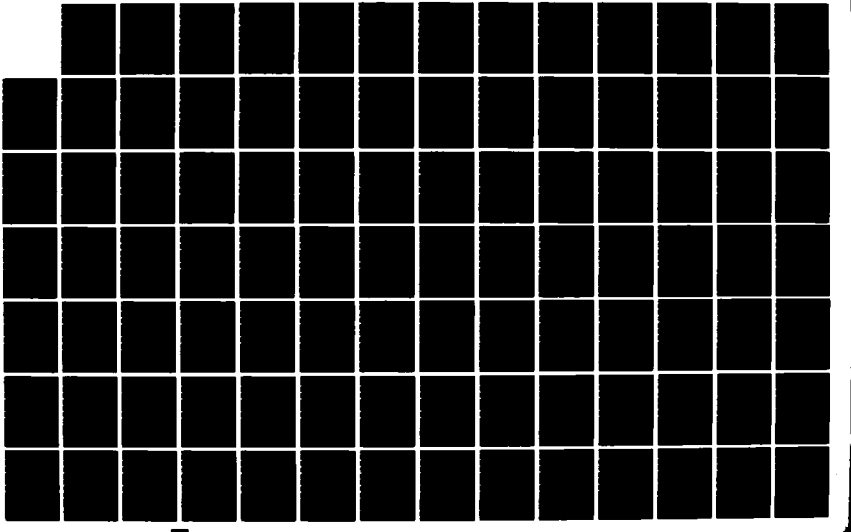
Total Number of Subjects Enrolled to Date: _____

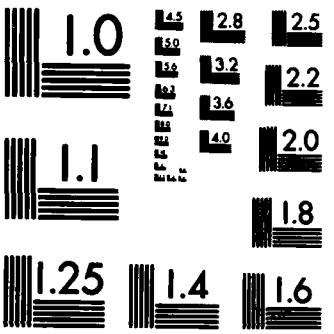
Date of Periodic Review _____ Results _____

Objective(s): To evaluate the in vivo function of frozen platelets by transfusion into thrombocytopenic patients.

Technical Approach: Technically, our ability to harvest, freeze, store and thaw platelets has been a total success using the protocol developed by Dr. Valeri's laboratory.

Progress: The preliminary steps of harvesting and freezing platelets for patient use is being accomplished. Initially, our efforts have been directed at leukemics in remission who are plateletpheresed on a regular basis, and their platelets frozen and stored. Should any of these leukemics relapse and become thrombocytopenic secondary to either the leukemic process or their chemotherapy, their own platelets will be thawed and transfused. The efficacy of these autologous cryopreserved platelets will be monitored.





Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-39-84 Status: Completed

Title: Clinical Evaluation of Abbott Tdx Acetaminophen Assay.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator Gregory J. Urbanski, Ph.D., CPT, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Pathology	Associate Investigators: Jack C. Chaffin, M.D., MAJ, MC
Key Words: Acetaminophen assay	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): 1) To determine the precision of the Tdx Acetaminophen assay, within run and between run, and to determine the stability of the standard curve.

2) To determine the accuracy of the TDx Acetaminophen assay by comparison with an established reference method.

3) To assess the performance of the TDx Acetaminophen assay in a clinical laboratory environment.

Technical Approach: The curve stability, precision and accuracy of the TDx-acetaminophen assay by performing the assay on standards and controls of known concentration was determined. The performance and correlation of the method by performing the assay in parallel with the laboratory reference method (Syva Emit) on clinical spcimens was carried out.

Progress: The Tdx-acetaminophen assay compared favorably with the established reference method.

Detail Summary Sheet

Date: 7 Nov 84 Proj No: C-17-82 Status: Completed

Title: Beta-Thromboglobulin Levels and Platelet Function in the Newborn.

Start Date 20 Jan 82	Est Comp Date:
Principal Investigator Terry E. Pick, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators: Isidoro Chapa, DAC
Key Words: Beta-thromboglobulin	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 9,027

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To determine the level of beta-thromboglobulin in the health, full-term and preterm gestation neonate; to measure platelet aggregation in this same population; to determine if a correlation exists between beta-thromboglobulin levels and platelet aggregation in the term and preterm gestation neonate.

Technical Approach: Twenty cc of whole blood will be obtained from the umbilical cord of 50 healthy term infants and 25 pre-term infants. Beta-thromboglobulin determinations will be performed as well as a determination of platelet function.

Progress: Even though the study has been completed, the principal investigator had no significant data to report.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-19-83 Status: Ongoing

Title: Comparison of Efficacy of Theophylline Administered by Continuous Infusion vs Bolus for Status Asthmaticus.

Start Date 3 Mar 83	Est Comp Date:
Principal Investigator William H. Parry, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators:
Key Words: Status asthmaticus	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 83 Results Continue

Objective(s): To determine which of two methods of IV Theophylline administration is more effective in reversing status asthmaticus.

Technical Approach: Theophylline will be administered in a double-blind fashion, i.e. initially all patients will receive a bolus of 6 mg/kg over 20 minutes. One-half of the patient population, chosen at random, will receive a bolus of 5 mg/kg every 4 hours; the other half will receive a continuous infusion of 1 mg/kg per hour of Theophylline after the initial bolus. The study will end at 24 hours.

Progress: No patients have been entered. The principal investigator is awaiting the equiment which will provide monitoring.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-69-83 Status: Completed

Title: A Study of the Inheritance Patterns of Classical 21-Hydroxylase Deficiency and Related Alleles.

Start Date 9 Sep 84	Est Comp Date:
Principal Investigator Thomas A. Perkins, D.O., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators:
Key Words: Deficiency, 21-hydroxylase	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: $1,000.00

Number of Subjects Enrolled During Reporting Period: 2

Total Number of Subjects Enrolled to Date: 2

Date of Periodic Review n/a Results Completed

Objective(s): Individuals at risk of late onsent and cryptic 21-Hydroxylase deficiency as well as families with documented classical salt-losing 21-Hydroxylase deficiency will be studied. Since the gene-type of individuals with the various forms of 21-Hydroxylase deficiency has not been fully elucidated, those individuals identified will be closely scrutinized for possible expressions of these alleles by HLA typing and certain endocrine function tests.

Technical Approach: A family with classical salt-losing 21-hydroxylase deficiency in two siblings was evaluated for heterozygote carriers as well as possible late-onset and cryptic congenital adrenal hyperplasia using HLA typing and serum 17-OH progesterone response to IV ACTH.

Progress: A cryptic gene was found with a classical gene in the mother of the two siblings. The resultant phenotypic expression is that of a mild late-onsent congenital adrenal hyperplasia. It is possible that this could have been predicted in the mother's childhood by biochemical studies based on the clinical suspicion of an androgen excess syndrome manifesting itself by pubarche prior to thelarche and hirsutism.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-14-84 Status: Terminated

Title: Serum Salicylate Levels in Children with Acute Gastroenteritis Treated with Bismuth Subsalicylate.

Start Date 16 Mar 84	Est Comp Date:
Principal Investigator Hector Pabon, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators: William H. Parry, M.D., COL, MC Terry E. Pick, M.D., LTC, MC
Key Words: Salicylate, serum Gastroenteritis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): 1) To evaluate salicylate levels in children with diarrhea treated with a bismuth subsalicylate preparation.

2) To establish a therapeutic dosage schedule of bismuth subsalicylate in children with altered gastrointestinal mucosa, which will avoid salicylism.

Technical Approach: None.

Progress: Because of time constraints between time of approval and completion of residency training, the protocol was not started.

Detail Summary Sheet

Date: 22 Oct 84	Proj No: C-26-84	Status: Completed

Title: Factitious Hypoglycemia in Neonates.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Samuel Mujica, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators: John D. Roscelli, M.D., LTC, MC
Key Words: Factitious hypoglycemia	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 15

Total Number of Subjects Enrolled to Date: 15

Date of Periodic Review n/a Results

Objective(s): To determine (a) if there is a correlation between the magnitude of artifactual hypoglycemia with naturally occurring hematocrits in the newborn; (b) if the rate of glucose drop is related to the reticulocyte count, young hypermetabolic red blood cells which are present in high numbers in newborn and could account for reports of increased red blood cell glycolysis in neonates vs adults; (c) if the rate of glucose drop is related to platelet or white blood cell count, both of which can be elevated in newborns; (d) if the dextrostix on blood or plasma, done immediately, is a more reliable indicator of patient's glucose status than routinely processed serum glucose; and (e) if any tube or preservation method (ice) is successful in preventing artifactual hypoglycemia in routinely processed specimens.

Technical Approach: Cord blood was obtained from 15 random deliveries. Complete blood count (CBC) which included: hematocrit, leukocyte count with differential, plate count and reticulocyte count; serum glucose; and spun hematocrit were immediately determined. At the same time, cord blood was placed in 2 plain red top tubes, 2 serum separator tubes, and 2 pedi fluoridated tubes. One set of tubes was left standing at room temperature for three hours and a second set was placed in ice for three hours, after which serum glucose was determined on all specimens. Differences between the glucose value obtained immediately and those obtained after three hours of storage were determined for blood in red top (plain), fluoridated, and serum separator tubes. This difference was used to determine the difference between methods of specimen storage for preserving the serum glucose.

Progress: A difference of up to 30 mg/dl from the stat value occurred in samples kept at room temperature for three hours. No correlation was found between the extent of <u>in vitro</u> glycolysis and the individual effect of the red cell, leukocyte, reticulocyte, or platelet count. The Dextrostix was found to be an inaccurate method for detecting hypoglycemia in the neonate.

C-26-84 (continued)

Blood glucose samples that are not processed immediately need to be preserved in ice for accurate results. The fluoridated tube offers a good approximation when ice is not available.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-34-84 Status: Ongoing

Title: An Explanatory Study of the Exceptional Family Member Program.

Start Date 10 May 84	Est Comp Date:
Principal Investigator Robert H. Gemmill, MAJ, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators: Lewis F. Gold, M.D., LTC, MC
Key Words: Exceptional family member program	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review_____ Results_____

Objective(s): 1) To describe characteristics of the exceptional family member population.

2) To study how Army active duty personnel with exceptional family members perceive the Exceptional Family Member Program.

Technical Approach: Questionnaires have been distributed to each of the participating hospitals.

Progress: Due to a lower than expected questionnaire return rate, questionnaire distribution is planned to be continued until the end of October 1984. Analysis of data will begin upon receipt of completed questionnaires.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-69-84 Status: Ongoing

Title: Beta-thromboglobulin Levels in Adolescent Females with and without Use of Oral Contraceptives.

Start Date 13 Sep 84	Est Comp Date:
Principal Investigator Avis Meeks Day, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators:
Key Words: Beta-thromboglobulin	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): Beta-thromboglobulin will be measured in normal adolescent female controls and in their age-matched peers on oral contraceptives.

Technical Approach: Blood for Beta-thromboglobulin levels will be obtained at the time of routine blood work on 25 females between the ages of 14-19 years of age, prior to beginning oral contraceptives. The same amount will be drwn from 25 age-matched controls not on oral contraceptives during routine physicals at the Adolescent Medicine Clinic.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-70-84 Status: Ongoing

Title: Evaluation of the Serum Lead Levels in the Children of the Military Community of Fort Sam Houston.

Start Date 13 Sep 84	Est Comp Date:
Principal Investigator Wilson Torres, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators: Terry E. Pick, M.D., LTC, MC
Key Words: Lead levels, serum	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To determine if there is risk of lead intoxication in the children of the military community and establish a screening program that could be utilized in efforts to prevent plumbism in children assigned to this area.

Technical Approach: Blood samples will be drawn from patients ages 6 months through 6 years. Blood will be sent for serum lead level.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-71-84 Status: Ongoing

Title: Normal Lymph Node Size in Children.

Start Date 13 Sep 84	Est Comp Date:
Principal Investigator Reginald H. Moore, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Pediatrics	Associate Investigators: Terry E. Pick, M.D., LTC, MC
Key Words: Lymph node	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): To establish baseline normals for lymph node sizes in children based on age variation as well as variations in anatomical location of these nodes.

Technical Approach: Children ages 1 to 18 with reasonable palpable nodes will be included in the study. Lymph node measurement will be taken as part of the routine physical examination.

Progress: This is a new study.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-68-84 Status: Ongoing

Title: A Medical Inpatient Group Treatment Program to Improve Coping with Hospital Stress.

Start Date 13 Sep 84	Est Comp Date:
Principal Investigator John B. Powell, Ph.D., CPT, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Psychiatry	*Associate Investigators:*
Key Words: Hospital stress	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): To determine if a group treatment program for medical inpatients can improve patient's ability to cope with hospital- and illness-induced psychological distress.

Technical Approach: Subjects for inclusion in this study will be hospitalized patients on Wards 43G and 43H. The group treatment program will be open to all patients, whether they volunteer for the study or not. The group treatment program is designed to produce significant psychological improvement in those variables shown to be most related to illness.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-79-84 Status: Ongoing

Title: Biofeedback Treatment of Patients with Irritable Bowel Syndrome (IBS).

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator John B. Powell, Ph.D., CPT, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Psychiatry/Psychology	Associate Investigators: Fred Goldner, M.D., COL, MC
Key Words: Irritable bowel syndrome	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): To determine if abdominal pain in patients with IBS can be significantly reduced by treatment in a structured program of biofeedback and stress management procedures.

Technical Approach: Patients with IBS will be asked to attend one gorup session and two individually-scheduled EMG biofeedback sessions. The group sessions will be designed to teach stress management and relaxation skills, with the individual sessions designed for practice and reinforcement of those skills. Participants will be asked to practice at home with a tape of relaxation exercises.

Progress: This is a new study.

Detail Summary Sheet

Date: 19 Oct 84 Proj No: C-12-77 Status: Ongoing

Title: Intravenous Administration of I^{131} (NP 59) for Adrenal Evaluation of Imaging.

Start Date 15 Nov 76	Est Comp Date:
Principal Investigator (vice Bunker) Michael F. Hartshorne, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department Radiology/Nuclear Medicine	Associate Investigators:
Key Words: Adrenal scan	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 1

Total Number of Subjects Enrolled to Date: 1

Date of Periodic Review 9 Mar 84 Results Continue

Objective(s): Clinical evaluation of NP 59 as a diagnostic agent for the detection of adrenal-cortical disorders and as a potential scanning agent for detecting structural abnormalities of the adrenal medulla.

Technical Approach: This study will be performed on 50 patients after complete evaluation by the Endocrinology Service. The radiopharmaceutical will be administered by slow IV injection with a dose of 1mCi in adults and 15mCi/kg in children. Lugol's solution, 5 drops twice daily starting one day before injection and continuing for two weeks, will be used to block thyroid uptake of radioiodine. Images will be obtained on th 4th, 7th, and 11th day following injection using scintillation camera.

Progress: During this period, only one patient study was conducted. The study was found to be positive (allowing preopertive diagnosis and localization of a funcitoning adrenal adenoma) and was an extremely valuable diagnostic tool in the management of this patient's disease.

Although the demand for this pharmaceutical has been less than initially anticipated, it has demonstrated its diagnostic usefulness for assessment of patients suspected of having Cushing's syndrome, hyperaldosteronism, and pheochromocytoma.

Detail Summary Sheet

Date: 7 Nov 84	Proj No: C-10-83	Status: Completed

Title: Hepatic Ablation with Absolute Ethanol in Dogs.

Start Date 6 Jan 83	Est Comp Date:
Principal Investigator (vice Fritz) Frank P. Wilson,Jr., M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Radiology	Associate Investigators:
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To evaluate the morbidity of partial hepatic ablation with absolute ethanol, and the pathology of the response by the liver.

Technical Approach: Nine mongrel dogs were anesthetized with 2 mg/kg of Nembutol and maintained on spontaneous respirations. Selective and subselective branches of the hepatic artery were infused with varying doses of USP alcohol (95%). The alcohol was premixed with non-ionic contrast material to enhance fluoroscopic delivery of the embolizing agent. Pre- and post-embolization serum hepatic enzyme determinations were obtained to evaluate changes in hepatic function. Repeat arteriography was performed on the surviving animals; and in one nuclear medicine liver-spleen scan utilizing Technetium labeled macroaggregated albumin and sulfur colloid was obtained.

Progress: Three of the nine animals died within 24 hours post-embolization. Serum hepatic enzyme studies were obtained in five animals. All five animals studied showed dramatic transient elevation of serum hepatic enzymes (SGOT, SGPT, Alkaline Phosphatase). These levels returned to normal within thirty days. Adequate gross and microscopic studies were obtained in three animals. The gross examinations revealed a linear, discolored and well-defined area of fibrosis in the distribution of the embolized vessel. Microscopic examination in all animals was identical. A distinct, well-defined transition from normal

C-10-83 (continued)

hepatic tissue to a zone of inflammatory cells surrounding an area of complete fibrous replacement of hepatic tissue was seen. This zone of fibrous scar corresponded to the distribution of the embolized segment.

Even though further animal experimentation is necessary before this technique can be safely applied to human patients, no further studies will be done.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-58-83 Status: Ongoing

Title: Evaluation of Indium Oxine In-III Labeled Cellular Blood Components

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator (vice Bunker) Michael F. Hartshorne, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Radiology/Nuclear Med.	Associate Investigators: Alfred J. Landry, R.Ph., MAJ, MSC
Key Words: Labeled cellular blood components	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 64

Total Number of Subjects Enrolled to Date: 93

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To evaluate the clinical usefulness of Indium Oxine labeled cellular blood components in infections, vascular, and platelet disorders.

Technical Approach: A series of 200 volunteers, consisting of active duty, retired, and appropriate dependent personnel, will be injected with a maximum of 500 uCi of Indium-111 labeled to either autologous or homologous cellular blood components. Clinical indications for requesting Indium-111 WBCs or platelets will be those normally applied to confirm or rule out inflammatory disease/ abscess (WBC) or thrombosis/thrombocytopenia (platelet). The dose will be administered IV. Imaging with a gamma camera will usually commence within 24 hours.

Progress: To date 93 studies have been conducted without evidence of adverse reaction. The diagnostic value of this study is outstanding and continues to gain widespread demand from the medical staff.

Detail Summary Sheet

Date: 30 Oct 84	Proj No: C-82-83	Status: Completed

Title: Pediatric Urography: Open Clinical Trial of Iohexol in Patients not More than Six Years of Age.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator (Vice Ramirez) Billy E. Cunningham, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Radiology	Associate Investigators:
Key Words: Iohexol Urography	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 6

Total Number of Subjects Enrolled to Date: 6

Date of Periodic Review 13 Jul 84 Results Continue

Objective(s): To evaluate the safety of iohexol in intravenous urography in pediatric patients less than seven years of age by measuring changes in vital signs, changes in blood and urine biochemistries, and recording adverse reactions; to evaluate the quality of radiographic visualization afforded by iohexol in intravenous urography in pediatric patients less than seven years of age.

Technical Approach: Patients scheduled for urography were eligible for the study. Iohexol was injected into the vein and x-rays obtained and blood samples obtained as outlined in the protocol.

Progress: Iohexol was found to be a safe, effective method of performing intravenous urography in the pediatric patient.

Detail Summary Sheet

Date: 24 Oct 84 Proj No: C-21-78 Status: Ongoing

Title: Clinical Study of Intraocular Lenses.

Start Date February 1978	Est Comp Date:
Principal Investigator (vice Bode) John D. Walker, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Ophthalmology	Associate Investigators: Donald Griffith, M.D., COL, MC
Key Words: Intraocular lens Cataract extraction	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 154

To al Number of Subjects Enrolled to Date: 620

Date of Periodic Review 10 May 84 Results Continue

Objective(s): To establish the safety and effectiveness of this device for use in human subjects according to guidelines recommended by the Food and Drug Administration ophthalmic advisory panel.

Technical Approach: Pursuant to protocols approved by the FDA, all have selected suitable patients for insertion of both posterior chamber and anterior chamber intraocular lenses. Using standard surgical techniques, these lenses were inserted as part of a cataract operation.

Progress: In the last year, as in previous years, approximately 154 lenses were implainted under the guidelines of the FDA. Adverse reactions numbered two. In these cases the lenses were removed and the patients received good vision. These cases were reported to the FDA.

Detail Summary Sheet

Date: 22 Mar 84	Proj No: C-22-81	Status: Terminated

Title: The Effect of Prophylactic Antibiotics on Wound Sepsis Following Elective Cholecystectomy.

Start Date 26 Mar 81	Est Comp Date:
Principal Investigator Cheryl A. Wesen, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/General Surgery	Associate Investigators: Michael J. Walters, M.D., COL, MC
Key Words: Wound sepsis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review 10 May 84 Results Terminated

Objective(s): To determine if the use of prophylactic broad-spectrum antibiotics will significantly decrease the incidence of wound sepsis following elective cholecystectomy for chronic cholecystitis and/or cholelithiasis.

Technical Approach: None.

Progress: This study was terminated due to failure to respond to annual review request and lack of progress.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-41-81 Status: Ongoing

Title: Hearing Levels in Otherwise Healthy Children Who Were Exposed to Ultrasound While Fetuses.

Start Date 15 Jun 81	Est Comp Date:
Principal Investigator Leonard Brown, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Otolaryngology	Associate Investigators: Robert Sawyer, M.D., COL, MC
Key Words: Ultrasound	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 15

Total Number of Subjects Enrolled to Date: 30

Date of Periodic Review 10 May 84 Results Continue

Objective(s): To measure hearing levels in otherwise healthy children who underwent diagnostic ultrasound in utero.

Technical Approach: Hearing levels of children with in utero ultrasound exposure are compared to those who received no in utero ultrasound. History and physicals are performed on each patient at the time of their audiometric evaluations.

Progress: A preliminary report is to be submitted to the World Congress on ENT. The study will be continued to increase the data base.

Detail Summary Sheet

Date: 16 Oct 1984 Proj No: C-57-81 Status: Completed

Title: Cardiac Surgery Prospective Follow-up Project.

Start Date 20 Aug 81	Est Comp Date:
Principal Investigator (vice Peake) Harold D. Head, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Thoracic Surgery	Associate Investigators:
Key Words: Cardiac Surgery	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date: 107

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To follow-up patients who have had cardiac surgical procedures to assess: a. Short-term outcome; b. Long-term outcome; c. Prognostic factors and relate above to work status and military service.

Technical Approach: All active duty patients undergoing coronary artery bypass at BAMC from October 1980 through December 1982 were reviewed in detail and were directly contacted for later posoperative follow-up. One hundred and seven patients were entered.

Progress: There were two perioperative mortalities, leaving 105 late survivors for study. Follow-up was obtained in 100% of patients. Data studied included coronary risk factors and their modification, results of MEB-PEB proceedings, late functional abilities including performance of duty, and late cardiac events.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-6-82 Status: Terminated

Title: Antibiotic Prophylaxis for Transurethral Resection of the Prostate.

Start Date 21 Oct 81	Est Comp Date:
Principal Investigator Ian M. Thompson, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Urology	Associate Investigators: C. Ritchie Spence, M.D., COL, MC James B. Rounder, M.D., CPT, MC Vern Juchau, LTC, MSC
Key Words: Prostate, transurethral resection	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 13

Date of Periodic Review 9 Mar 84 Results Continue

Objective(s): To determine if a rationale exists for the prophylactic use of antibiotics prior to and during transurethral resection of the prostate.

Technical Approach: Septra treatment was compared to placebo treatment as antibiotic therapy for transurethral resection of the prostate. Thirteen patients have been entered.

Progress: No difference in incidence of febrile reactions or positive cultures of urine were noted in the 13 patients studied. During the study's conduct, it became apparent that only a small number of patients were eligible for inclusion due to strict antibiotic therapy exclusion criteria. During this period, many studies have been published in the urologic literature addressing this same question. It is felt that further continuation of the study would not add to the already extensive volume of knowledge in this area. For this reason, the study has been terminated.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-20-82 Status: Ongoing

Title: Long-Term Effect of Orthoptics on the Fusional Vergences.

Start Date 16 Feb 82	Est Comp Date:
Principal Investigator John C. Kotulak, O.D., CPT, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Optometry	Associate Investigators:
Key Words: Orthoptics	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To determine the long-range efficacy or permanency of orthoptics as a treatment modality for strabismus.

Technical Approach: Eligible service members and their dependents who have been diagnosed as having binocularity problems and for whom Orthoptics has been determined to be of benefit are enrolled in BAMC's Visual Therapy Program. If, the patient completes the visual therapy regime and is found to have satisfied accepted historical functional cure criteria, they are enrolled in the Investigational Study.

The patient's positive or negative fusional reserve is recorded on index cards and they are called for further measurement of this same datus according to a predetermined follow-up schedule.

The long-range efficacy of Orthoptics is to be determined by a 100 subject field.

Progress: Since only those patients who complete the program and satisfy our criteria are enrolled, progress, though steady, is slow.

It must be pointed out that, while many patients do not satisfy accepted criteria for functional cure, they are nonetheless helped immensely; that is, symptoms are frequently eliminated completely and visual function greatly improved.

Detail Summary Sheet

Date: 16 May 84 Proj No: C-34-82 Status: Terminated

Title: Preoperative Detection of Gram Negative Pathogens in Intraocular Surgery Candidates.

Start Date 18 May 82	Est Comp Date:
Principal Investigator Don G. Griffith, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Ophthalmology	Associate Investigators:
Key Words: Limulus Lysate	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 14

Date of Periodic Review 11 May 1984 Results Terminated

Objective(s): To utilize Limulus Lysate screening to detect the presence of gram negative organisms in and around the eye in patients scheduled for ocular surgery.

Technical Approach: Limulus Lysate was inoculated with swbs from subject's conjunctiva.

Progress: Difficulties with handling materials and false-positive responses have led to the decision to discontinue the study.

Detail Summary Sheet

Date: 25 Oct 84	Proj No: C-41-82	Status: Ongoing

Title: Color Defects in Glaucoma.

Start Date 7 Jul 82	Est Comp Date:
Principal Investigator (vice Bode) John D. Walker, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Ophthalmology	Associate Investigators: Jonas Moses, SP4
Key Words: Glaucoma	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 13 Jan 84 Results Continue

Objective(s): To asssess the relationship between glaucoma and color vision defects. Primary emphasis will be on the correlation of early color vision defects with other signs of glaucoma, such as visual field changs and optic disc changs. The prognostic significance of color vision defects in the early glaucoma and ocular hypertensive groups will also be evaluated.

Technical Approach: Visual fields and Farnsworth-Munsell hue tests will be analyzed to determine whether the latter will be predictive in glaucoma.

Progress: Approximately 30 fields have been identified as fitting the criteria of the study. The computer programs have been developed to facilitate analysis of the data. Follow-up fields are needed to look for changes and progression of the disease.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-12-83 Status: Ongoing

Title: Is Routine Intraoperative Cholangiography (IOC) a Useful Adjunct to Cholecystectomy?

Start Date 6 Jan 83	Est Comp Date:
Principal Investigator Daniel Rosenthal, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/General Surgery	Associate Investigators:
Key Words: Intraoperative cholangiography	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review n/a Results _____

Objective(s): To determine if routine IOC significantly alters the management of patients with cholecystolithiasis by demonstrating at operation the presence of unsuspected stones in the biliary tree.

Technical Approach: All medical centers using routine IOC will be asked to participate. On a quarterly basis, they will be asked to report the number of IOCs performed, number of normals, what was done, and the number of minutes added to the procedure.

Progress: Data is being collected for final analysis.

Detail Summary Sheet

Date: 26 Oct 84	Proj No: C-35-83	Status: Terminated

Title: Cromolyn Sodium 4% Treatment for Vernal Conjunctivitis.

Start Date 19 Apr 83	Est Comp Date:
Principal Investigator Donald D. Bode, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Ophthalmology	Associate Investigators:
Key Words: Vernal conjunctivitis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To give relief of troublesome itching due to vernal conjunctivitis when conventional treatment has failed.

Technical Approach: None.

Progress: No patients were entered on this study. Since the principal investigator has retired, it was elected to terminate the study.

Detail Summary Sheet

Date: 16 Oct 84 Proj No: C-36-83 Status: Completed

Title: Evaluation of the Boston Lens® and Supporting Solutions.

Start Date 6 May 83	Est Comp Date:
Principal Investigator Kenneth D. Gallinger, O.D., MAJ, MSC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Optometry	Associate Investigators:
Key Words: Boston Lens®	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 32

Date of Periodic Review n/a Results

Objective(s): To determine the safety and effectiveness of the Boston Lens® Contact Lens and Supporting Solutions.

Technical Approach: Eligible patients were evaluated as to efficacy of wearing the Boston Lens to correct visual acuity, provide comfort and provide an acceptable physiological fit of the eye.

Progress: The lens was found to be a safe, effective type of rigic contact lens and has been approved by the FDA.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-52-83 Status: Ongoing

Title: Effect of ¼% Phenylephrine Nose Drops on Otitis Media and Serous Otitis.

Start Date 16 Jun 83	Est Comp Date:
Principal Investigator David L. Webb, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Otolaryngology	Associate Investigators: Terry E. Pick, M.D., LTC, MC Michael L. Lepore, M.D., LTC, MC Sylvester G. Ramirez, M.D., CPT, MC
Key Words: Otitis media Serous otitis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 0

Date of Periodic Review 11 May 84 Results Continue

Objective(s): To test the effect of phenylephrine nose drops on the course of otitis media and serous otitis.

Technical Approach: Patients, ages 3-8 years, with acute onset otitis media or seruous otitis, will be included in the study. All patients will receive antibiotic therapy. Patients not allergic to penicillin will receive Amoxacillin, and those allergic to penicillin will receive Septra. Patients assigned to Group A will recieved ¼% phenylephrine nose drops four times a day for two weeks. Patients assigned to Group B will receive a saline nose drop solution prepared by the pharmacy four times a day for two weeks. If at the end of two weeks the tympanogram shows no evidence of clearing, the code will be broken and another form of therapy instituted.

Progress: The principal investigator has been off the ENT Service for one year. The study should start in the near future.

Detail Summary Sheet

Date: 16 Oct 84 Proj No: C-53-83 Status: Terminated

Title: Occupational History and Low Back Problems.

Start Date 16 Jun 83	Est Comp Date:
Principal Investigator Stephen E. Piwinski, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery	Associate Investigators: Donald Gordon, M.D., LTC, MC
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To retrospectively examine occupational history in patients with selected diagnoses of low back problems.

Technical Approach: None.

Progress: The principal investigator was unable to do the study because of other commitments.

Detail Summary Sheet

Date: 16 Oct 84	Proj No: C-54-83	Status: Completed

Title: Plastafil Carbon-Fiber Implant Study.

Start Date 8 Jul 83	Est Comp Date:
Principal Investigator Keith L. Markey, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Orthopaedics	Associate Investigators:
Key Words: Plastafil-carbon-fiber implant	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 30

Total Number of Subjects Enrolled to Date: 30

Date of Periodic Review 3 Jul 84 Results Closed

Objective(s): To determine the efficacy and safety of the Plastafil Carbon-Fiber Bioprosthesis in the surgical treatment of acute and chronic knee-ligament injuries involving the anterior cruciate ligament, with or without injuries to the medial collateral ligament, lateral lateral ligament of the posterior cruciate ligament.

Technical Approach: Military members and dependents were enrolled in the program to study the efficacy of the carbon fiber bioproste=hesis for the anterior cruciate ligament. They were randomly selected for this device in comparison to standard therapy. Acute and chronic injuries were studied.

Progress: Due to unsatisfactory results, the study was closed to new entries but remains open for follow-up only.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-56-83 Status: Terminated

Title: A Clinical Study Comparing the Efficacy of Fenoprofen Calcium, Phenylbutazone and Placebo in the Treatment of Acute Soft Tissue Injuries.

Start Date 8 Jul 83	Est Comp Date:
Principal Investigator Keith L. Markey, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Orthopaedics	Associate Investigators: Lynda A. Manuel, M.D., CPT, MC Van E. Wahlgren, M.D., CPT, MC
Key Words: Injury, soft tissue	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 10

Total Number of Subjects Enrolled to Date: 10

Date of Periodic Review 3 Jul 84 Results Terminate

Objective(s): To compare the efficacy of fenoprofen calcium enteric coated, phenylbutazone, and placebo using patient-selected doses as anti-inflammatory and analgesic agents in the treatment of inflammatory soft tissue injuries.

Technical Approach: Patients were referred to the Orthopaedic Clinic from Troop Medical Clinic and Emergency Room with acute injuries.

Progress: The study was terminated due to noncompliance with the prescribed treatment regimen.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-61-83 Status: Completed

Title: Impact of the Unilateral Ureteral Obstruction on Renal Excretion of Calcium and Phosphate.

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator Ian M. Thompson, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Urology	Associate Investigators: Joseph J. Ernst, M.D., CPT, MC C. Ritchie Spence, M.D., COL, MC Edward J. Shumski, M.D., LTC, MC
Key Words: Ureteral obstruction Calculi	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 1,188.00

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review n/a Results _____

Objective(s): To determine whether metabolic evaluation can be performed in the clinical setting on patients with unilaterally obstructing ureteral calculi.

Technical Approach: Thirty rats were randomized to receive either sham ureteral ligation or standard ligation of ureters unilaterally. Animals had baseline 24 hour collections of calcium, phosphorus, and creatinine performed followed by three weeks of similar collections.

Progress: The study has been completed. Thus far, no difference has been noted between the two treatment groups.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-62-83 Status: Ongoing

Title: Intravitreal Injection of Beta-Lactam Antibiotics.

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator Mary A. O'Hara, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Ophthalmology	Associate Investigators: Donald D. Bode, M.D., COL, MC Clayton L. Hadick, D.V.M., CPT, VC
Key Words: Endophthalmitis Intravitreal antibiotics	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 709.43

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a/ Results

Objective(s): To determine the toxicity of two beta-lactam antibiotics when administered intravitreally in rabbits.

Technical Approach: Cefoperazone is injected into the vitreous of Dutch belted rabbits in varying concentrations. As a control, saline is also injected into several eyes. Toxicity is then determined over a 6 week period with exams of the eyes and ERG's. At the end of this period, the animals are sacrificed and the eyes examined histopathologically.

Progress: Results at present show early signs of toxicity at the highest dose injected (32 mg) in 50% of rabbits. Final results should be available in the near future.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-63-83 Status: Ongoing

Title: Dose-Response Relationship of Cyclophosphamide in Murine Transitional Cell Carcinoma.

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator Ian M. Thompson, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Urology	Associate Investigators: Donald Lamm, M.D. C. Ritchie Spence, M.D., COL, CM Edward J. Shumski, M.D., LTC, MC William Gregory, SP5 Clayton L. Hadick, D.V.M., CPT, VC
Key Words: Carcinoma, transitional cell	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 300.00

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To determine if Cyclophosphamide can prevent tumor growth in doses in which it has been previously demonstrated that no agents effectively inhibit growth of murine transitional cell carcinoma.

Technical Approach: Animals will be anesthetized and receive 0.1cc of a suspension of $1x10^4$ or $1x10^5$ or $1x10^6$ tumor cells into the right lateral thigh. Each group will receive either cyclophosphamide or saline intraperitoneally. Animals will be followed for four weeks. They will be checked every three days for tumor presence.

Progress: The study has not yet been performed due to concomitant similar studies and restrictions upon animal housing.

Detail Summary Sheet

Date: 16 Oct 83 Proj No: C-71-83 Status: Terminated

Title: Measurement of Myocardial Oxygen Consumption in Various Modes of Partial Left Heart Bypass.

Start Date 15 Nov 83	Est Comp Date:
Principal Investigator David J. Cohen, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Thoracic Surgery	Associate Investigators: James B. Peake, M.D., COL, MC Robert L. Treasure, M.D., COL, MC
Key Words: Myocardial oxygen Bypass, heart	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): 1) To develop a method of measuring MVO_2 in a chronic animal preparation.

2) To utilize this model to assess the effectiveness of various forms of left heart bypass.

Technical Approach: Project was not started.

Progress: Termination was recommended based on ETS of principal investigator and continuation of study was not deemed practical.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-74-83 Status: Completed

Title: Coagulum Pyelolithotomy Using Cryoprecipitate with and without the Use of Thrombin.

Start Date 30 Sep 84	Est Comp Date:
Principal Investigator Kenneth R. Bryant, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Urology	Associate Investigators: John C. Norbeck, M.D., MAJ, MC Rene Sepulveda, M.D., MAJ, MC C. Ritchie Spence, M.D., COL, MC
Key Words: Thrombin Pyelolithotomy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): To show that cryoprecipitate injected into the renal pelvis of an adult pig will produce a coagulum with a tensile strength comparable to a coagulum produced by mixing cryoprecipitate and bovine thrombin in a 25:3 ratio.

Technical Approach: Ten Cheshire pigs weighing between 36 and 52 pounds were obtained. General endotracheal anesthesia with Fluothane and Nitrous Oxide was used in all animals. The kidneys were exposed using a midline transabdominal incision. The right kidney was mobnilized and the proximal ureter ligated. The right renal pelvis was cannulated with a 21 gauge butterfly needle and the volume of the pelvis measured. The coagulum components were then prepared and injected into the right renal pelvis to equal the measured volume. AFter seven minutes the renal pedicle was ligated, divided, and the kidney removed. The coagulum was then extracted by gentle compression on the kidney. A 2 x 0.5 cm segment was dissected from the clot and the tensile strength of this segment measured.

Progress: The clots with thrombin had a mean tensile strength of 62.50 grams, and the clots without thrombin had a mean tensile stength of 113.75 grams. When compared to the clots with thrombin, the clots without thrombin had a significantly greater tensile strength.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-75-83 Status: Completed

Title: The Preservation of Cellular Architecture by Verapamil Durigng Renal Artery Occlusion.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Joseph J. Ernst, M.D., CPT., MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/ Urology	Associate Investigators: Ian M. Thompson, M.D., CPT, MC
Key Words: Renal artery occlusion Verapamil	Edward J. Shumski, M.D., LTC, MC C. Ritchie Spence, M.D., COL, MC William Gregory, SP5 Wendy Blomgren, SP5
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: n/a

Total Number of Subjects Enrolled to Date: n/a

Date of Periodic Review n/a Results

Objective(s): To determine the ability of Verapamil to Prevent ischemic changse in renal histology and intracellular architecture following renal artery occlusion in rats.

Technical Approach: Twenty female Spawlding rats weighting 275-300 grams were divided into two groups. In the control group, the left renal pedicle was occluded for 60 minutes using Heifitz clips through a midline abdominal incision under intraperitoneal pentobarbital anesthesia. The experimental group was given a bolus of verapamil 0.15 mg/kg 15 minutes prior to the left renal pedicle clamping. The animals were sacrified on days 2, 3, 5, 7, 14, 21, and 30. Samples of both kidneys from each group were divided into small portions and placed into Karnovsky's solution for electron microscopic examination and the remainder of the kidney placed into formalin. Transmission EM sections and hematoxylin and eosin (H&E) stains were prepared for the specimens which were then examined by a pathologist who was blind as to which animals had received verapamil. The H&E preparations were then graded with respect to seven parameters: necrosis, mitoses, number of small and large nucleoli, nuclear pleomorphism shown as differing sizes and shapes of nuclei, hydropic change or cellular edema, nuclear hyperchromism and nuclear karyorhesis.

Progress: In 11 of the 14 pairs of rats, the kidneys of animals that had received verapamil revealed better preservation of tutublar integrity. In the remaining three pairs, the control kidneys were the better of the two. Although ischemic changes were most pronounced during the first week, the recovery was far from complete after 30 days.

C-75-83 (continued)

The differences between the paired kidneys were not dramatic, probably because severe necrosis was an unusual finding. Perhaps if the kidneys had been clamped for a longer period of time, protection against severe necrosis would have been tested.

Electron microscopic findings of ischemia were interesting and usually concurred with light microscopic descriptions. Kidneys with minimal changs generally had no significant cellular architectural abnormalities. Edema of the endoplasmic reticulum was common. Mitochondrial edema and disruption correlated well with hydropic changes.

From the present study, we conclude that verapamil may help preserve renal tubular viability. Further studies are needed to determine the proper timing and dosage of verapamil required to maximize any preservative effect during ischemic injury.

Detail Summary Sheet

Date: 22 Oct 84 Proj No: C-81-83 Status: Completed

Title: Chronic Administration of Nifedipine and the Cardiovascular Responses to High-Dose Fentanyl Anesthesia and Coronary Artery Bypass Grafting in Man.

Start Date 30 Sep 84	Est Comp Date:
Principal Investigator John T. Caskey, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Anesthesiology	Associate Investigators: Curtis L. Baysinger, M.D., MAJ, MC
Key Words: Bypass Graft, coronary artery	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 30

Total Number of Subjects Enrolled to Date: 30

Date of Periodic Review 12 Jul 84 Results Study completed

Objective(s): To investigate the cardiovascular effects of the prior administration of Nifedipine in patients anesthetized with fentanyl-diazepam-pancuronium-oxygen during coronary artery bypass surgery.

Technical Approach: Eligible patients were assigned to one of three groups. One group had their nifedipine withdrawn the day before surgery, the second group had their morning dose withheld on the day of surgery, and the third group received their nifedipine on the morning of surgery. Two 5 cc. samples of blood were obtained from the indwelling radial artery catheter - one prior to anesthetic induction and the other post-bypass for nifedipine levels. The samples were tested for nifedipine levels.

Progress: Nifedipine levels averaged 2.26 ng/ml in the group that had their nifedipine withdrawn the day before surgery, 10.61 ng/ml in the group that had their morning dose on the day of surgery withheld, and 16.19 ng/ml in the group that received their nifedipine the day of surgery.

In general, patients in the nifedipine groups exhibited similar blood pressure, cardiac output, and systemic vascular resistance when compared with control patients during induction of anesthesia with only very minor differences noted.

C-81-83 (continued)

Most notable among our results was that while control patients showed a small rise in cardiac output with induction of anesthesia, from an average of 5.1 liters/min to 5.7 liters/min (n = 26), the nifedipine groups maintained their output at the same level following induction of anesthesia. Similarly, changes in blood pressure and systemic vascular resistance were comparable in both control and nifedipine groups.

An important part of the study focused on whether any of the groups experienced angina on the morning of surgery or during the lining procedure. In the group that had their nifedipine withdrawn the day prior to surgery, two of ten patients experienced angina; while in the group that had their monrning dose withdrawn, three of ten patients experienced angina on the morning of surgery. In contrast, and perhaps more significant, none of the patients that received their nifedipine on the morning of surgery experienced any angina on the morning of surgery.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-5-84 Status: Ongoing

Title: Adjuvant Portal Venous Infusion of High Risk Colon Cancer.

Start Date 19 Dec 83	Est Comp Date:
Principal Investigator Kendall Reed, D.O., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/General Surgery	Associate Investigators: J. Dean McCracken, M.D., COL, MC
Key Words: Infusion, portal venous	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To determine if the long-term infusion of the portal venous system with Floxuridine (FUDR) via a totally implantable pump for continuous infusion or intermittent portal venous infusion via an implantable catheter will prevent or eradicate microscopic hepatic metastases in patients undergoing curative resection of colon carcinoma which have extended through the entire thickness of the bowel wall (Duke's B_2) or involve regional nodes (Duke's C_1 and C_2).

Technical Approach: Eligible patients will be randomized to one of three treatment programs. Program #1 consists of placement of the Infus-A-Port catheter plus follow-up. Program #2 consists of implanting the Infusaid pump followed by continuous treatment with the chemotherapy drug, FUDR, for one year. Program #3 consists of placement of the Infus-A-Port catheter and injection of the chemotherapy drug 5-FU daily for 5 days and then repeated every 28 days for one year.

Progress: Thus far, no patients have been entered on the study.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-12-84 Status: Ongoing

Title: Microbiological Analysis of Aspirate Fluid Taken During Extraction of Cataracts.

Start Date 13 Mar 84	Est Comp Date:
Principal Investigator William F. Prestowitz, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Ophthalmology	Associate Investigators: Donald D. Bode, M.D., COL, MC
Key Words: Cataracts	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): To ascertain (a) how frequently bacteria are introduced into the anterior chamber of the eye during cataract surgery; (b) when bacteria are present in the aspirate fluid, how many patients subsequently develop infeciton; (c) which species of bacteria are most frequently introduced into the anterior chamber and which species are most frequently opportunistic pathogens in the site.

Technical Approach: During surgery for cataract removal, sterile saline is used to irrigate the anterior chamber. This fluid will be collected and examined for bacteria.

Progress: Performance of this study has been postponed until Spring of 1985 because of problems with specimen collection.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-15-84 Status: Ongoing

Title: Evaluation of Lung Water Changes in Post Coronary Bypass Patients Receiving Hetastarch.

Start Date 16 Mar 84	Est Comp Date:
Principal Investigator (vice Cohen) Robert A. Helsel, M.D., COL, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Thoracic	Associate Investigators: Richard M. Briggs, M.D., MAJ, MC James B. Peake, M.D., COL, MC Harold D. Head, M.D., COL, MC
Key Words: Bypass, coronary	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): 1) To answer whether postoperative use of Hetastarch (Hespan®) in coronary artery bypass graft surgery patients causes increased extravascular lung water as compared to patients treated in standard manner with blood, crystalloid solution and albumin.

2) To determine whether there are differences in extravascular lung water in either of the above groups as compared to patients treated with blood and crystalloid alone.

Technical Approach: Eligible participants will be assigned to one of three groups. All groups will have surgery conducted in the same manner and all will be given blood as needed. One group will receive additional albumin, one will receive Hetastarch and one will receive crystalloid solution (dilute salt water) as needed to support blood pressure. Other blood tests and measurements will be the same as those required for all open heart surgery patients.

Progress: Study has not been started. Awaiting receipt of Edwards lung-water computer.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-17-84 Status: Ongoing

Title: Esophageal Doppler: A Non-Invasive Method for Detection of Venous Air Embolism During Lumbar Laminectomy.

Start Date 16 Mar 84	Est Comp Date:
Principal Investigator Paul E. Casinelli, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Anesthesiology	Associate Investigators: Curtis Baysinger, M.D., MAJ, MC Steven I. Schmidt, M.D., CPT, MC William J. Reynolds, M.D., Ph.D., LTC, MC
Key Words: Laminectomy, lumbar Esophageal doppler Venous air embolism	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To investigate the efficacy of the esophageal doppler device in detecting the occurrence of venous air embolism during lumbar laminectomy, and to determine the incidence of venous air embolism during lumbar laminectomy.

Technical Approach: The principal investigator reports that they have experienced difficulty with the choice; i.e., not being sensitive enough to detect sounds of air. This problem is being worked on.

Progress: They hope to have the device working within six months. The study will continue after the problem has been resolved.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-38-84 Status: Ongoing

Title: Postoperative Pain Differential Between Electrocautery and Suture Ligation in Tonsillectomy.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator Jesse Moss, Jr., M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Otolaryngology	Associate Investigators: Robert Sawyer, MD., COL, MC Donald J. Wittich, M.D., MAJ, MC
Key Words: Tonsillectomy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 20

Total Number of Subjects Enrolled to Date: 20

Date of Periodic Review _____ Results _____

Objective(s): To determine which of the two generally accepted methods of obtaining hemostasis, i.e., electrocautery or suture ligation, causes less postoperative pain.

Technical Approach: After routine tonsillectomies in ASA I patients, hemostasis is achieved with suturing on one side and cauterizing on the other side. AT one and ten days after surgery, patients are asked if one side hurts more than the other side.

Progress: Twenty patients have been entered into this study. Initial data indicates that sutured side hurts worse in the first 24 hours, but cauterizing hurts worse from the 2nd thru 10th day.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-40-84 *Status: Ongoing*

Title: Comparison and Calibration of the Gates Method for Glomerular Filtration Rate and the Tauxe Method for Effective Renal Plasma Flow Determination with Standard Inulin and Para-Aminohippurate Clearances.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator Ian M. Thompson, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Departments of Surgery/Radiology	Associate Investigators: John M. Bauman, M.D., CPT, MC Michael F. Hartshorne, M.D., MAJ, MC Michael A. Cawthon, D.O., CPT, MC William H. Howard, III, M.D., CPT, MC C. Ritchie Spence, M.D., COL, MC
Key Words: Glomerular filtration rate (GFR) Effective renal plasma flow (ERPF)	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 169.76

Number of Subjects Enrolled During Reporting Period: 3

Total Number of Subjects Enrolled to Date: 3

Date of Periodic Review _____ Results _____

Objective(s): 1) To accurately determine the values for GFR and ERPF in 15 patients with predetermined ranges of renal functional impairment.

2) To obtain values for GFR and ERPF in the same patients through current techniques employed in the Nuclear Medicine Clinic.

3) To compare the accuracy of the Nuclear Medicine techniques as employed at this institution with the accepted standards, and correct the mathematical derivations thereof, as necessary, in order to provide improved patient care.

Technical Approach: Patients undergo a standardized renogram followed by simultaneous inulin and PAH clearances.

Progress: Thus far, three patients have entered the study. As inulin and PAH clearances will depend on values obtained from batch processing, values are not yet available. After 10 patients are entered in the study, all specimens will be processed.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-41-84 Status: Ongoing

Title: Establishment of Human Urothelial Tissue Culture and Investigation of Carcinogenic Effects of Known Urothelial Carcinogens.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator Ian M. Thompson, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Urology	Associate Investigators: Debra J. Krikorian, Ph.D., CPT, MSC James B. Rounder, M.D., CPT, MC C. Ritchie Spence, M.D., COL, MC Edward J. Shumski, M.D., LTC, MC
Key Words: Carcinogens Tissue culture	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 1,316.83

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To establish a line of normal urothelial cells (human in tissue culture) to allow further investigation of the effect of various carcinogens in vitro.

Technical Approach: A small piece of surgically excised normal human urothelium is preserved in tissue culture medium after the performance of an indicated urologic surgical procedure. This is then dissected using sterile microscopic technique and urothelial cells cultured. Cell lines are observed for morphologic changes.

Progress: Thus far, three separate tissue cultures have been established. Two sets of cultures failed due to inability to explant cells. However, a third culture, obtained from bladder neck, has produced a viable cell culture. This is currently being passed through a third culture pass.

Detail Summary Sheet

Date: 20 Oct 84 Proj No: C-42-84 Status: Ongoing

Title: Impact on Clinical Stage of Prostate Carcinoma of Routine Screening.

Start Date 21 Jun 84	Est Comp Date:
Principal Investigator James B. Rounder, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Urology	Associate Investigators: Julius L. Teague, M.D., CPT, MC Ian M. Thompson, M.D., CPT, MC C. Ritchie Spence, M.D., COL, MC
Key Words: Carcinoma prostate	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To determine if routine screening for carcinoma of the prostate impacts on the staging distribution of the disease within the screened population.

Technical Approach: Charts of patients with the diagnosis of carcinoma of the prostate during two periods, 1974-1979 and 1979-1984, will be reviewed. The purpose is to assess whether screening for adenocarcinoma of the prostate improved the clinical stage between the two periods and to evaluate whether screening procedures at Brooke Army Medical Center result in a lesser ovrall stage of prostate cancer than the national norm.

Progress: Evaluation of charts and records has been completed, and the data are being processed at this time.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-45-84 Status: Ongoing

Title: The Value of Preoperative Sulfur Colloid Marrow Scintigraphy in the Treatment of Acute Fractures of the Femoral Neck.

Start Date 17 Jul 84	Est Comp Date:
Principal Investigator Stephen Norwood, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Orthopaedics	Associate Investigators: Michael F. Hartshorne, M.D., MAJ, MC Lida Crook, M.D., MAJ, MC
Key Words: Scintigraphy, sulfur colloid Fracture, femoral neck	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 6

Total Number of Subjects Enrolled to Date: 6

Date of Periodic Review _____ Results _____

Objective(s): 1) To determine the usefulness of preoperative sulfur colloid marrow scintigraphy in the evaluation of acute fractures of the femoral neck.

2) To determine whether the method of sulfur colloid scintigraphy is successful in determining subsequent avascularity.

Technical Approach: Sulfur colloid marrow scintigraphy will be performed within 48 hours of fracture of the femoral neck prior to treatment of the fracture. Patients will be asked to return for follow-up evaluations for two years.

Progress: It is too early to report any significant data.

Detail Summary Sheet

Date: 30 Oct 84	Proj No: C-63-84	Status: Ongoing

Title: Double Blind Reference Control Study Comparing the Efficacy of CHEMOLASE® and Chymodiactin® in the Treatment of Back Pain and Leg Pain Due to Lumbar Disc Disease.

Start Date 10 Sep 84	Est Comp Date:
Principal Investigator Allan L. Bucknell, M.D., LTC, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Orthopaedics	Associate Investigators: Lloyd A. Youngblood, M.D., LTC, MC
Key Words: Lumbar disc disease	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): To compare the efficacy of two chymopapain preparations, CHEMOLASE® and Chymodiactin®, in the treatment of low back pain due to lumbar disc disease.

Technical Approach: This study has been temporarily delayed because of new information regarding side effects of chymopapain as published in the August 1984 "FDA Drug Bulletin."

Progress: None. Awaiting approval from the Commander, HSC.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-66-84 Status: Ongoing

Title: Fiberoptic Laryngoscopy and the Incidence of Sore Throat After General Anesthesia.

Start Date 13 Sep 84	Est Comp Date:
Principal Investigator Richard K. Baumgarten, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Anesthesiology	Associate Investigators:
Key Words: Fiberoptic laryngoscope	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To determine if fibroptic laryngoscopy prevents sore throat.

Technical Approach: Patients scheduled for elective surgery where inbutaion is expected to last less than one and one-half hours will be eligible for the study. A standardized postoperative interview will be utilized to identify postoperative sore throats and their severity.

Progress: This is a new study. No data are available.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-72-84 Status: Ongoing

Title: Outpatient Intra-Arterial Digital Subtraction Angiography in the Evaluation of Patients with Atherosclerotic Peripheral Vascular Disease.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator Bruce M. Elliott, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/General Surgery	Associate Investigators: Michael J. Huggins, M.D., MAJ, MC
Key Words: Angiography, digital subtraction	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To determine the safety, feasibility, and accuracy of outpatient intra-arterial angiography using digital subtaction angiographic technology in patients with known atherosclerotic peripheral vascular disease who otherwise would undergo conventional angiography.

Technical Approach: Patients who would routinely be scheduled for elective admission for conventional angiography will be offered outpatient intra-arterial digital subtraction angiography. Routine x-ray and blood studies will be obtained prior to the date of the scheduled arteriogram. Arteriography will be performed in the Digital Subtraction Angiography Suite utilizing the standard Seldinger technique. Upon completion of the angiogram, the patient will be observed in the Recovery Room for two hours. If there are no complications, the patient will be discharged.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-75-84 Status: Ongoing

Title: The Chronic Administration of Diltiazem and the Cardiovascular Responses to High Dose Fentanyl Anesthesia and Coronary Artery Surgery in Man.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator Curtis L. Baysinger, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Anesthesiology	Associate Investigators: Alan Zablocki, M.D., MAJ, MC Jerry Epps, M.D., CPT, MC Charles Kingsley, M.D., CPT, MC Brent Grishkin, M.D., LTC, MC
Key Words: Anesthesia,	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To investigate the cardiovasculr effects of the prior administration of diltiazem in patients anesthetized with fentanyl-diazepam-pancuronium-oxygen anesthesia during coronary artery bypass surgery.

Technical Approach: Thirty male patients taking diltiazem for greater than 30 days who will undergo coronary artery surgery will be asked to participate and will be randomized to two groups of 15. The control group will be patients who are not taking diltiazem and present for coronary artery surgery. Group I will have their diltiazem withheld over the 24 hours prior to surgery. Group II will have their diltiazem continued up until surgery. Both patients with good and poor left ventricular function will be studied.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-76-84 Status: Ongoing

Title: H_1 and H_2 Antagonists and Protamine Sulfate Administration Following Cardiopulmonary Bypass.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator Curtis L. Baysinger, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Anesthesiology	Associate Investigators: Charles Kingsley, M.D., CPT, MC Jerry Epps, M.D., CPT, MC Brent Grishkin, M.D., LTC, MC
Key Words: Bypass, cardiopulmonary	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To investigate the cardiovascular effects following protamine reversal of heparin effect post cardiopulmonary bypass with and without the use of H_1 and H_2 histamine antagonists.

Technical Approach: Sixty patients scheduled to undergo coronary artery and valvular surgery will be randomized to one of four groups. All patients will receive protamine in a dose calculated from a protamine titration, at a rate of 100 mg/min via an infusion pump. Groups I and III will receive the protamine through the proximal port of the Swan Ganz catheter, groups II and IV through a left atrial line. Groups III and IV will also receive 4 mg/kg of cimetidine and 1 mg/kg of diphenhydramine during cardiopulmonary bypass. The data obtained from patients on chronic calcium blocker therapy will be compared to the data obtained from those not taking calcium channel blockers.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-77-84 Status: Ongoing

Title: Can Nondepolarizing Muscle Relaxants Produce Intubating Conditions as Rapidly as Succinylcholine?

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator Richard K. Baumgarten, M.D., MAJ, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Anesthesiology	Associate Investigators: Jerry Brown, D.O., CPT, MC
Key Words: Succinylcholine	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): To replace succinylcholine for rapid sequence intubation of the trachea.

Technical Approach: Adult ASA Class 1, 2, or 3 patients will be eligible for the study. One of three muscle relaxants will be used, either atracurium or vecuronium in divided doses or succinylcholine. Time until successful intubation will be recorded.

Progress: This is a new study.

Detail Summary Sheet

Date: 31 Oct 84 Proj No: C-78-84 Status: Ongoing

Title: The Effects of Atracurium and Vecuronium on Intraocular Pressure and the Time Required for Intubation.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator William J. Evans, M.D., CPT, MC	Facility Brooke Army Medical Center
Dept/Svc Department of Surgery/Anesthesiology	Associate Investigators: Mark H. Cook, M.D., CPT, MC
Key Words: Pressure, intraocular	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): 1) Do these drugs affect intraocular pressure? If so, how much?

2) How soon after induction of anesthesia can a patient be intubated when these drugs are used?

3) Can these drugs be safely and effectively used in ophthalmologic surgery; in particular, in repair of penetrating globe injuries and in glaucoma surgery?

Technical Approach: Intraocular pressure and the time required for intubation of 60 patients undergoing general anesthesia for elective nonocular surgery will be measured. Patients will be assigned to one of three groups: Group I will serve as controls and will receive succinylcholine for intubation; Group II will receive atracurium; and Group III will receive vecuronium. Groups II and III will be used to compare time to intubate with Group I. Prior to induction of anesthesia, the opthalmology resident will record the patient's intraocular pressure.

Progress: This is a new study.

Detail Summary Sheet

Date: 15 Jun 84 Proj No: C-33-82 Status: Completed

Title: Evaluation of Radiation Exposure to Personnel During Cardiac Catheterization.

Start Date 18 May 82	Est Comp Date:
Principal Investigator (vice Matthews) Robert N. Cherry, Jr., MAJ, MSC	Facility Brooke Army Medical Center
Dept/Svc Medical Physics Service	Associate Investigators: William E. Craig, M.D., LTC, MC Joseph P. Murgo, M.D., COL, MC Robert J. Matthews, CPT, MSC
Key Words: Radiation exposure	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review 11 May 84 Results Completed

Objective(s): To assess x-ray exposure levels of personnel during cardiac catheterizations, particularly exposures to the lens of the eye and the thyroid which are the radiosensitive organs of interest.

Technical Approach: Each person working in the cardiac catheterization laboratories wore a whole-body film badge underneath a lead protective apron to monitor trunk exposure. An additional film badge was worn on the collar or the top edge of the lead protective apron to monitor head-and-neck exposure. The thyroid and lenses of the eyes were the organs of interest for head-and-neck monitoring.

As part of the efforts to identify trends and make estimates for future radiation exposures, data were accumulated to correlate exposures measured by the collar badges with thyroid exposure, lens exposure, fluoroscopic x-ray "on" time, and laboratory duty.

Progress: As indicated by film badges, the average exposure to the whole-body badge of a cardiologist behind a lead protective apron during cardiac catheterization indicated dose equivalents of 0.06 millirem per minute of x-ray "on" time (no analysis differentiating between fluoroscopy and cinefluorography was done) and to the collar badge of about 1.4 millirems per minute. A similar study using thermoluminescent dosimeters placed directly over the thyroid and on the forehead showed a thyroid dose equivalent of 1.0 millirem per minute and a lens dose equivalent of about 1.1 millirems per minute.

C-33-82 (continued)

The average x-ray "on" time for a single cardiac catheterization study was 23 ± 12 minutes (error is one standard deviation for an average using 660 cases). This implies that the dose equivalents for cardiologists per case averages about 1.4 millirems whole-body and 30 millirems head-and-neck, and for technicians is about 0.2 millirem whole-body and about 7 millirems head-and-neck. These values are about the same as others reported in the literature.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-67-84 Status: Ongoing

Title: Community Health Nurses, Boundary Spanning, and Stress.

Start Date 13 Spe 84	Est Comp Date:
Principal Investigator Mary M. Hoke, MAJ, ANC	Facility Brooke Army Medical Center
Dept/Svc Preventive Medicine	Associate Investigators:
Key Words: Community Health Nurse	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To identify the relationship between the community health nurse's boundary spanning activities, role conflict, and role ambiguity.

Technical Approach: A questionnaire will be mailed to community health nurses at each MEDDAC.

Progress: This study will be initiated in November 1984.

Detail Summary Sheet

Date: 25 Oct 84 Proj No: C-21-82 Status: Completed

Title: A Predictive Model for Estimating the Response to the Army Physical Fitness and Weight Control Program.

Start Date 16 Feb 82	Est Comp Date:
Principal Investigator Kenneth D. James, MAJ, MSC	Facility Washington State University
Dept/Svc	Associate Investigators:
Key Words: Weight control program	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 0

Total Number of Subjects Enrolled to Date: 71

Date of Periodic Review _____ Results _____

Objective(s): To determine if overweight but generally healthy soldiers participating in a mandatory weight reduction program lose weight at the same rate and degree as matched general clinic patients desiring weight loss for cosmetic and/or health reasons.

Technical Approach: Seventy-one overweight military and civilian subjects from 10 United States Army posts participated in a year long weight reduction study. The military groups were enrolled in the mandatory United States Army Physical Fitness and Weight Control program with aversive administrative penalties for failure to comply with weight reduction.

Progress: No difference in either rate and/or duration of weight loss was experienced between the military (mandatory) and civilian (control) groups. Multiple regression prediction equations based on initial weight and certain behavior 1 factors identified at the initiation of the study, were identified and found useful for predicting weight status at monthly intervals throughout the follow-up year for both treatment groups. Those variables predicting weight status at the 26th week of program participation were: (1) Initial weight at time of study implementation; (2) Eat in order to satisfy hunger; (3) Agree with

the statement that things go wrong even though no fault of your own; (4) Usually eat alone; and (5) Father was obese. Those variables predicting weight status at the 52nd week of program participation were: (1) Initial weight at time of study implementation; (2) Eat in order to satisfy hunger; (3) Usually eat when happy; (4) Usually eat alone; and (5) Indicate a reason for gaining weight was because of being home alone. Correlates of multiple regression variables to the Army Physical Fitness and Weight Control Program administrative factors were identified for subsequent further exploration.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-25-84 Status: Ongoing

Title: Body Composition Determinations on Physically Active Soldiers.

Start Date 12 Apr 84	Est Comp Date:
Principal Investigator Madeleine S. Rose, MAJ, AMSC	Facility Brooke Army Medical Center
Dept/Svc Nutrition Care Division	Associate Investigators: James H. Anderson, Jr., M.D., LTC, MC
Key Words: Army weight control program	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost: 557.97

Number of Subjects Enrolled During Reporting Period: 108

Total Number of Subjects Enrolled to Date: 108

Date of Periodic Review _____ Results _____

Objective(s): 1) To review and test the procedures used in the Army Weight Control progrm on 108 male soldiers with a possible outcome being the revision of the procedure and/or standards for evaluating obesity as defined by AR 600-9.

2) Examine metabolic adjustments during weight loss in 20 overweight and 20 overweight/obese soldiers on either an 800 Kcal mixed of 800 Kcal ketogenic diet.

Technical Approach: Company Commanders were approached for lists of oveweight individuals. Each soldier has been contacted individually for an appointment to explain the study. Volunteers undergo the following tests: body volume measurement, residual volume, alcohol dilution, whole body liquid scintillation counting, 24-hour urine collection, and x-ray of left shoulder to elbow.

Progress: 67% of volunteers have completed Phase I. Extra subjects will be enrolled in this phase in order to obtain equal racial groups and to make up for withdrawals. Phase II is 7.5% completed.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-13-84 Status: Completed

Title: The Effects of a 6-Week and a 16-Week Fitness Program on Selected Physiological and Psychological Parameters.

Start Date 16 Mar 84	Est Comp Date:
Principal Investigator Joseph P. Maloney, LTC, ANC	Facility Academy of Health Sciences
Dept/Svc Department of Nursing	Associate Investigators: Virginia R. Cheney, MAJ, ANC William B. Spring, CPT(P), ANC
Key Words: Fitness program	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 51

Total Number of Subjects Enrolled to Date: 51

Date of Periodic Review _____ Results _____

Objective(s): 1) Assess the relationship among exercise history, demographic variables, life style, self image, and organized PT programs.

2) Assess the relationship among length of PT programs, intensity of programs, and injury rates.

3) Assess the relationship among injuries, profiles, exercise, history, and level of fitness.

4) Evaluate the level of fitness of Army Nurse Corps Officers entering the AMEDD Officer Basic Course and the AMEDD Officer Advanced Course.

Technical Approach: The sample consisted of 18 Officer Advanced Course and 33 Officer Basic Course Army Nurse Corps Officers attending the Academy of Health Sciences. After the subjects completed the baseline testing, they embarked on a program of progressive conditioning. The subjects met three times a week for one hour of a physical exercise program that was supervised by Academy Faculty. Each session consisted of 20 minutes of limbering up exercises, 30 minutes of running, gradually increasing the speed and distance, and 10 minutes of cooling down.

The pre- and post-training evaluation consisted of both physiological and psychological measures. The physiological measures were Army Physical Readiness Scores, recovery index, maximum oxygen uptake and body weight. The psychological variables were trait anxiety and self esteem.

Progress: The results indicated that the 16 week progressive physical training program produced a significant increase in levels of physical readiness scores, recovery index and predicted VO_2 MAX. Significant improvements were also shown

C-13-84 (continued)

in the psychological parameters of trait anxiety and self esteen. There was essentially no weight change in the subjects which is an expected finding unless there is adequate control of food intake during an active physical conditioning program.

The results of the 6-week program indicate that the length of this program is not long enough to produce changes in some parameters - in particular the psychological parameters. Since both trait anxiety and self esteem are incorporated into the personality over a period of years, 6 weeks is not enough time to create a change. The effects of the program on the physiological parameters is inconclusive due to the loss of data. The only parameter that was significantly changed was the physical readiness variable. There was no significant change in recovery index which could lead one to conclude that a 6-week conditioning program was insufficient to improve levels of physical fitness. However, the purpose of the 6-week program is to develop awareness of the military physical fitness standards that the new ANC must soon meet. The program provides the student an opportunity to begin working toward achievement of these standards.

Detail Summary Sheet

Date: 9 Jul 84 Proj No: C-85-83 Status: Completed

Title: A Comparison of the Hold-relax and Fluori-methane Spray Procedures in Increasing Hamstring Flexibility

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Francis J. Pottenger, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Laurie C. Chapman, 2LT, AMSC
Key Words: Hamstring flexibility	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 40

Total Number of Subjects Enrolled to Date: 40

Date of Periodic Review _____ Results _____

Objective(s): 1. To evaluate and compare two currently used therapeutic techniques to improve hamstring flexibility in a sample population of normal males.

2. To determine if there is a statistically significant difference in the amount of hamstring muscle stretch obtained using fluori-methane® and that obtained using a PNF hold-relax method.

Technical Approach: Forty healthy male subjects between 20 and 46 years of age were randomly assigned to receive either a Fluori-methoane® spray treatment or a hold-relax treatment on one lower extremity. The non-teated lower extremity was designated as a control and received no treatment. A change in straight leg raise angle was operationally defined as indicating change in hamstring flexibility.

Progress: Fluori-methane® spray treatment produced at 3.75° average increase in straight leg raise angle, hold-relax treatment a 2.1° average increase, and the control leg increased an average of 0.45°. Using a one-way analysis of variance, the Fluori-methane® spray treatment was found to have produced a statistically greater ($\alpha = 0.05$) increase in the average straight leg angle than the hold-relax treatment.

Detail Summary Sheet

Date: 9 Jul 84	Proj No: C-86-83	Status: Completed

Title: Comparison of Submaximal versus Maximal Warm-ups on Isokinetic Tests

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator M. Jane Hays, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Dawn E. Wilson, 2LT, AMSC
Key Words: Submaximal warm-ups maximal warm-ups	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 42

Total Number of Subjects Enrolled to Date: 42

Date of Periodic Review _____ Results _____

Objective(s): To determine what type of warm-up will produce the most accurate measurement of baseline performance.

Technical Approach: Subjects were tested on Cybex II following Cybex's testing protocol for knee flexion/extension. A speed of 30 degrees per second on a 360 degree foot-pound scale was used in all tests and warm-ups. The subjects were their own control. One knee was tested following submaximal warm-ups and the other knee was tested following maximal warm-ups. Determination of which knee was tested first and the type warm-up used was done through randomization. A minimum of one minute rest periods followed all maximum contractions.

Progress: Results suggested that no significant differences, p value $<.375$, between submaximal and maximal warm-ups existed but there was a greater mean peak torque of the left limb and the first limb tested. It was concluded that either type warm-up will produce accurate baseline measurements and that leg dominance and testing order advantage may exist.

Detail Summary Sheet

Date: 9 Jul 84	Proj No: C-87-83	Status: Completed

Title: The Effects of Gravity Guided Lumbar Traction on Intervertebral Dimensions in the Lumbar Spine

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Michael D. Kane, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators:
Key Words: Lumbar traction	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 15

Total Number of Subjects Enrolled to Date: 15

Date of Periodic Review _____ Results _____

Objective(s): To determine the effects of gravity facilitated traction (inversion) on intervertebral dimensions of the lumbar spine.

Technical Approach: Fifteen normal male subjects were fully inverted for a period of ten minutes. Vertebral separation was measured on lateral roentgenograms both pre- and post-inversion by outlining the margins of the intervertebral bodies both anteriorly and posteriorly and the greatest vertical heights of the intervertebral foramina. Fine point engineering calipers were used to facilitate measurements. A student t-test for paired data was used to determine significance of separation between lumbar segments, following ten minutes of inversion. The alpha level was set at 0.05 for statistical significance.

Progress: Gravity facilitated traction produced increased separation at all levels measured. Mean anterior separation was significant at all levels except L3 - L4. Mean posterior separation was significant at all levels except L1 - L2 and L5 - S1. Mean intervertebral foraminal separation was significant at all levels but L5 - S1. If increases in intervertebral dimensions play a role in the relief of low back syndrome, then gravity facilitated traction may be an effective modality in the treatment of this condition.

Detail Summary Sheet

Date: 9 Jul 84	Proj No: C-88-83	Status: Completed

Title: Analysis of a Method of Measuring Pelvic Tilt

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Joanna M. Graziadei, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators:
Key Words: Pelvic Tilt	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 15

Total Number of Subjects Enrolled to Date: 15

Date of Periodic Review _____ Results _____

Objective(s): To evaluate a proposed clinical method of measuring pelvic tilt.

Technical Approach: The body surface measurements were obtained immediately prior to radiographic exposures. The participant was asked to assume a normal stance with bare feet comfortably apart and evenly aligned; arms were folded across the chest. The subject's hips were then exposed to reveal the anterior superior iliac spine (ASIS) and posterior superior iliac spine (PSIS). The distance between the ASIS and PSIS were determined with the bowleg calipers and metric ruler; then the vertical meter stick and pointer were used to measure the distance of each of these two points from the floor.

Progress: The results showed that no significant correlation existed between the measures of pelvic tilt, as determined by the method, and the measures of lumbosacral angle. It was concluded that the method of measuring pelvic tilt could not be related to a clinically significant anatomical feature.

Detail Summary Sheet

Date: 9 Jul 84 Proj No: C-89-83 Status: Completed

Title: A Comparative Analysis of the U.S. Army's Method for Determining Body Fat Content

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Michael J. Sharr, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Richard A. Evans, 2LT, AMSC
Key Words: Body fat	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 53

Total Number of Subjects Enrolled to Date: 53

Date of Periodic Review _____ Results _____

Objective(s): To evaluate the predictive accuracy of the U.S. Army's method for determining percent body fat recently established under AR600-9.

Technical Approach: The predictive accuracy of the Army's current equation for determining percent body fat was compared to a standard determined by water displacement. Alternative equations were also compared to this standard to determine if predictive accuracy of percent body fat could be enhanced. Specific body circumferences were selectively studied to determine if predictive accuracy could be further enhanced.

Progress: The accuracy of percent body fat predictions were shown to be significantly enhanced by alternative equations but not by specific body circumferences. By showing predictive accuracy was not optimized by the Army's method, the validity of the Army Weight Control Program becomes jeopardized.

Detail Summary Sheet

Date: 10 Jul 84	Proj No: C-90-83	Status: Completed

Title: Comparison of Using Heat Versus Heat and Cold During Stretching to Improve Flexibility

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Robert Bessen, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Gregory Ernst, 2LT, AMSC
Key Words: Flexibility	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 30

Total Number of Subjects Enrolled to Date: 30

Date of Periodic Review _____ Results _____

Objective(s): To evaluate the effectiveness of using heat versus heat and cold during hamstring stretching.

Technical Approach: Both hamstring musculotendinous units of each subject were stretched. The control leg received only heat during the stretch, while the experimental leg received heat followed by cold during the stretch. A modification of the sit and reach test was used to assess pre- and post-test hamstring flexibility. Following pre-test on each leg, the subject was placed in a position which stretched both hamstrings equally. Ten minutes of ultrasound was then simultaneously applied to both hamstrings, followed by a 20 minute application of hydrocollator packs to each. Following removal of the hydrocollator packs, one randomly selected hamstring received a 10 minute ice massage from origin to insertion. The stretch was then released on both hamstrings, and the subjects walked slowly for 10 minutes prior to lying supine for 40 minutes.

Progress: There was no significant difference in the change in flexibility between the two groups.

Detail Summary Sheet

Date: 10 Jul 84 Proj No: C-91-83 Status: Completed

Title: Effect of Arthroscopic Debridement and Washout on the Degenerative Knee As Demonstrated on the Cybex® II Isokinetic Dynamometer

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Ann E. Matson, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators:
Key Words: Knee, degenerative	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To compare the quadriceps femoris strength pre- and postoperatively of patients with degenerative joint disease, having been treated with percutaneous arthroscopic debridement and washout using the Cybex II isokinetic dynamometer and the Cybex isokinetic dual channel recorder.

Technical Approach: Due to nonavailability of study subjects, dummy data for 15 individuals were used. Quadriceps femoris torque was recorded at 180 and 300 degrees per second in accordance with the procedure given in the Cybex® testing manual.

Progress: A student t-test for paired data revealed that no statistically significant change in torque occurred as a result of surgery.

Conclusion: This study has potential given a longer period of time and a larger number of subjects from which to collect data. Based on dummy data, a conclusion is made that arthroscopic surgery has no effect on postoperative quadriceps femoris torque production in the patient with degenerative joint disease.

Detail Summary Sheet

Date: 10 Jul 84	Proj No: C-92-83	Status: Completed

Title: The Influence of Warm Water Immersion on Muscle Tension as Measured By Electromyography in Hemiplegic Patients

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Karen A. Johnson, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Bruce Reed, 2LT, AMSC Connie J. Seymour, 2LT, AMSC
Key Words: Electromyography	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 12

Total Number of Subjects Enrolled to Date: 12

Date of Periodic Review _____ Results _____

Objective(s): To determine the effect of warm water immersion on muscle activity in the affected upper extremity of hemiplegic patients.

Technical Approach: Twelve subjects were randomly assigned to either an experimental group treated with warm water immersion of the affected limb or a control group which did not receive treatment. Surface EMG and skin temperature were monitored throughout the experimental procedure. In addition, pre- and post-treatment upper extremity tasks were performed and graded according to the Fugl-Meyer Assessment.

Progress: The results indicated a significant ($p < .01$) increase in skin temperature and decrease in resting EMG for patients treated with thermal therapy, while no change was observed in subjects who received no treatment. No changes in performance were observed between Fugl-Meyer Assessment scores and corresponding EMG data pre- and post-treatment for all subjects.

Conclusion: Warm water immersion decreased resting muscle activity in the affected upper extremity of hemiplegic patients. The experimental procedure was non-invasive and provided a means of obtaining a reliable, objective measure of muscle activity in hemiplegic patients.

Detail Summary Sheet

Date: 10 Jul 84 Proj No: C-93-83 Status: Completed

Title: Eye Movement and Its Effect on Suboccipital Muscle Activity.

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Lawrence A. Bates, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators:
Key Words: Eye Movement	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 6

Total Number of Subjects Enrolled to Date: 6

Date of Periodic Review _____ Results _____

Objective(s): To add to the existing body of knowledge in the area of neuromuscular rehabilitation by showing a physiological link between eye movement and suboccipital muscle activity.

Technical Approach: Six healthy subjects with no known cervical, ocular, or vestibular pathology were studied. Each subject was tested for spontaneous nystagmus, and once negative results were obtained, testing proceeded. Eye movement was recorded using surface electrodes surrounding the eyes. Rectus capitus posterior major muscle activity was recorded using a bipolar EMG needle inserted in the muscle belly. The difference in muscle activity levels at each eye movement was compared to a baseline activity level for each patient. Three modes of movement were studied: optokinetics (optic tracking), voluntary gaze, and external eye pressure.

Progress: For all movements, in all patients, only two showed significant increased muscle activity when calculated using a standard t-test. It was felt that this was insufficient evidence to suggest that activity in the rectus capitus posterior major muscle was increased by the optic movements studied.

Detail Summary Sheet

Date: 10 Jul 84 Proj No: C-94-83 Status: Completed

Title: Quadriceps Femoris Muscle Strength in Open Versus Closed Menisectomy

Start Date 30 Sep 83	Est Comp Date:
Principal Investigator Mary Adriene Orr, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators:
Key Words: Menisectomy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To evaluate two methods of surgical management of meniscal derangement as measured by patient performance on the Cybex II® isokinetic exercise/testing unit.

Technical Approach: Data were collected retrospectively from four military physical therapy clinics. Eighteen subjects underwent open meniscectomy and 40 subjects underwent closed meniscectomy. Ages ranged from 18 to 37 years of age. Maximum quadriceps femoris muscle torque was measured when the subjects had gained knee range of motion from zero to 90 degrees and had demonstrated the ability to perform resistive exercises.

Progress: T-tests revealed a significant difference ($p < .005$) in both the percent strength deficits of the involved versus the uninvolved limb and the number of postoperative days before Cybex testing. An analysis of covariance indicated that the surgical procedure performed was the primary variable responsible for the quadriceps femoris muscle strength deficits in the early rehabilitation period.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-53-84 Status: Ongoing

Title: A Comparison of Anthropometric Formulas in Black Versus White Females.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Johanna Gabbard, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Elizabeth Canaveri, 2LT, AMSC
Key Words: Body fat	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): 1) To evaluate the accuracy of the Army's current method for predicting percent body fat in both black and white females.

2) To determine the most accurate existing anthropometric formula for predicting percent body fat in each of the two populations studied.

Technical Approach: The thickness of folds of skin on the right side of the body will be measured. Measurements will also be taken around five parts of the body and the information obtained from these measurements will be compared with water displacement which is a standard method.

Progress: This is a new study. No reportable data are available.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-54-84 Status: Ongoing

Title: Measurement of Peak Torque, Endurance, and Power After Use of Isotonic and Isokinetic Ergometers.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Carol Dabill, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Jody McGuire, 2LT, AMSC
Key Words: Ergometer, isotonic Ergometer, isokinetic	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To quantify and compare specific conditioning effects of isotonic and isokinetic bicycling programs.

Technical Approach: Participants will be asked to perform a half-hour of cycling three days a week. At the beginning and end of the study, they will be tested on a Cybex to determine the strength of the anterior thigh muscles.

Progress: This is a new study. No reportable data are available.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-55-84 Status: Ongoing

Title: Validation of the Long-Sitting Test on Subjects with Iliosacral Dysfunction.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Terry Bemis, CPT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Monte Daniel, 2LT, AMSC
Key Words: Iliosacral dysfunction	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): Validation of the long sitting test as an indicator of abnormal mechanisms of rotation of the innominate on the sacrum.

Technical Approach: Participants will lie on a treatment table and an ink line drawn on each ankle. Subjects will be positioned so that malleoli lie over a paper gride when the legs are extended. The distance of the malleoli from each other will be recorded and measured on grid paper for both the supine and long sitting position for each subject.

Progress: This is a new study. No data are available at this time.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-56-84 Status: Ongoing

Title: Investigaiton of Possible Contributing Factors to Hamstring Flexibility.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Mary Rossi, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Barbara Wax, 2LT, AMSC
Key Words: Hamstring	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To determine if age, sex, leg dominance and certain anthropometric measurements, Q-angle, calcaneal varus/valgus and hip flexion/extension, can be considered predictors of hamstring flexibility.

Technical Approach: The following measurements will be taken of both dies of the body:

1) Q-angle: the angle the muscles on the front of the thigh make with the knee cap.

2) Calcaneal varus/valgus: the angle the heel makes with the lower leg.

3) Passive straight leg raise: how far the leg can be lifted towards the head while lying on the back.

4) Hip flexion: how close the leg with knee bent can be brought to the chest.

5) Hip extension: while lying on the stomach, how far the leg can be lifted from the table.

6) Leg dominance.

Progress: This is a new study. No reportable data are available.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-57-84 Status: Ongoing

Title: The Effect of Stretching and Submaximal Warm-ups for Isokinetic Testing.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Carol D. Ross, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc *Physical Therapy Section*	Associate Investigators: Heidi A. Heckel, 2LT, AMSC
Key Words: Testing, isokinetic	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): To determine whether stretching, submaximal contractions, or a combination of the two will increase mean peak torque in isokinetic testing on the Cybex II.

Technical Approach: Forty five volunteers will be used to test the effects of stretching and submaximal warm-ups for isokinetic testing. Each group will be randomly assigned a variable warm-up routine of stretching, submaximal contractions, or a combination of the two.

Progress: This is a new study. No reportable data are available at this time.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-58-84 Status: Ongoing

Title: Contrast Baths vs. Cold Water Immersion: A Comparison of Vasomotor Response.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Gregg A. Forlini, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators: Mary J. Gamba, 2LT, AMSC
Key Words: Response, vasomotor	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): 1) To observe and compare vasomotor response and blood flow changs in the posterior tibial artery induced by ice water immersion or contrast bath therapy.

2) To further examine the possible occurrence of cold-induced vasodilation.

3) To compare vasomotor response in the ankle using various contrast bath therapy regimen.

Technical Approach: Two treatment groups will be studied using 32 subjects in each group. All subjects will be tested with the left ankle immersed in cold water. From these subjects four groups of eight subjects will be randomly chosen. Each group will e tested under a different contrast bath regimen with each subject serving as his/her own control.

Progress: This is a new study. No reportable data are available.

Detail Summary Sheet

Date: 30 Oct 84 Proj No: C-59-84 Status: Ongoing

Title: Systemic Levels and Systemic Effects of Ten Percent Hydrocortisone Induced Topically Using Phonophoresis.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Ramona C. Horton, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators:
Key Words: Phonophoresis	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): 1) To determine the level of hydrocortisone that enters the systemic circulation after 10 treatments of phonophoresis with 10% hydrocortisone.

2) To determine if the phonophoretic induction of hydrocortisone show any of the presently known side effects of hydrocortisone drug therapy.

Technical Approach: Each subject will have blood drawn to establish baseline levels of cortisol for that individual. The subjects will undergo phonophoresis with 3 ml of ointment for conduction, to the shoulder of their nondominant arm, every other day for a total of ten treatments. Ultrasound will be applied for five minutes. The test group will be treated with 10% hydrocortisone suspended in Unibase® cream. The control group will be treated with Unibase® minus the steroid. Blood will be drawn after the first and last treatments for comparison with initial cortisol levels.

Progress: This is a new study. No data are available.

Detail Summary Sheet

Date: 30 Oct 84	Proj No: C-60-84	Status: Ongoing

Title: Attitudes Toward the Use of Stress Management Techniques to Augment Physical Therapy.

Start Date 22 Aug 84	Est Comp Date:
Principal Investigator Kathy Branton, 2LT, AMSC	Facility Academy of Health Sciences
Dept/Svc Physical Therapy Section	Associate Investigators:
Key Words: Stress management	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: _____

Total Number of Subjects Enrolled to Date: _____

Date of Periodic Review _____ Results _____

Objective(s): Attempt to gather information about physical therapists' attitudes or beliefs, which may influence their willingness to adopt specific treatment approaches.

Technical Approach: Subjects will be requested to complete two brief pencil and paper attitudinal scales: The Rokeach Dogmatism Scale and the Bem Sex-Role Inventory. A questionnaire will be included with the above instruments to gather data on the subjects' age, sex, and years of professional experience as a physical therapist.

Progess: This is a new study. No data are available at this time.

Detail Summary Sheet

Date: 31 Oct 84 | Proj No: C-80-84 | Status: Ongoing

Title: Electro-Acuscope 80: Effectiveness in Treating Exercise-Induced Muscle Soreness.

Start Date 25 Sep 84	Est Comp Date:
Principal Investigator Larry L. Loomis, 2LT, AMSC	Facility Academy of Health Scineces
Dept/Svc Physical Therapy Section	Associate Investigators: Bradley D. Pearson, 2LT, AMSC
Key Words: Electro-Acuscope 80	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:_____

Total Number of Subjects Enrolled to Date:_____

Date of Periodic Review_____ Results_____

Objective(s): 1) To determine whether treatment with the Electro-Acuscope 80 can decrease functional limitations secondary to exercise-induced muscle soreness, based on Cybex II endurance tests.

2) To determine whether subjectively rated muscle soreness following exercise can be significantly decreased with Acuscope treatments.

Technical Approach: Participants will complete an exercise program of forearm muscles resulting in muscle soreness. They will then be assigned to either an Acuscope treatment group or placebo group. For the placebo group, the Acuscope will be used but no actual treatment will be given. During the three days following the exercise program, six Acuscope (or placebo) treatments (2 per day) will be given. They will then be asked to complete a form indicating the level of muscle soreness.

Progress: This is a new study.

Detail Summary Sheet

Date: 16 Oct 84 Proj No: C-43-83 Status: Terminated

Title: Comparison of Changes in Blood Pressure and Heart Rate with Metocurine and d-Tubocurarine.

Start Date 17 May 83	Est Comp Date:
Principal Investigator Carolyn Craig, R.N., CPT, ANC	Facility Darnall Army Hospital
Dept/Svc Department of Nursing/Anesthesiology	Associate Investigators: Alex House, R.N., CPT, ANC John A. Whitfield, R.N., CPT, ANC
Key Words:	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period:

Total Number of Subjects Enrolled to Date:

Date of Periodic Review Results

Objective(s): To determine the statistical difference and significance in changes of heart rate and mean arterial blood pressure that are attributable to the pharmacodynamics of Metocurine and d-Tubocurarine when extraeous variables of disease state, rate of injection, dose and metabolism, etc., are controlled.

Technical Approach: None.

Progress: This study was terminated due to PCS of principal investigators.

Detail Summary Sheet

Date: 26 Oct 84 Proj No: C-65-83 Status: Ongoing

Title: Perinatal Hyperviscosity.

Start Date 10 Aug 83	Est Comp Date:
Principal Investigator Jose I. Gierbolini, M.D., MAJ, MC	Facility Darnall Army Hospital
Dept/Svc Department of Pediatrics	Associate Investigators:
Key Words: Hyperviscosity	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 12

Total Number of Subjects Enrolled to Date: 12

Date of Periodic Review 13 Jul 84 Results Continue

Objective(s): To test the hypothesis that maternal and neonatal blood viscosities are correlated.

Technical Approach: Blood viscosity is done using an LVT-microviscometer.

Progress: Twelve patients are in the study at this time. All patients are high risk mothers.

Detail Summary Sheet

Date: 6 Aug 83	Proj No: C-48-83	Status: Completed

Title: An Evaluation of the Efficacy of Electroacutherapy in the Treatment of Temporomandibular Joint Pain

Start Date 16 Jun 83	Est Comp Date:
Principal Investigator Bradford W. Harper, D.D., MAJ, DC	Facility Darnell Army Community Hospital
Dept/Svc Dental Clinic #6	Associate Investigators: Robert E. Hillis, D.D., COL, DC Judith A. Stitley, MAJ, AMSC
Key Words: Electroacutherapy	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 16

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To determine the efficacy of electroacutherapy in the initial treatment of temporomandibular joint pain as compared to a standard initial treatment.

Technical Approach: Sixteen adult subjects received one of two treatment modalities. Subjects were asked to complete a medical/dental history following which they were examined intra- and extra-orally. Following examination, the subjects were assigned to either Group 1 (palliative treatment) or Group 2 (electroacutherapy).

Individuals referred for palliative treatment were referred to an oral surgeon who prescribed standard treatment consisting of 650 mg aspirin every six hours for two weeks, a nonspecific soft diet and warm moist compresses applied twice daily for 30 minutes. Group 2 subjects were referred to a physical therapist for electroacutherapy. The trained physical therapist used a Joanco® Model R to stimulate four acupuncture points commonly selected by acupuncturists for the treatment of temporomandibular joint pain. Each point was stimulated for 30 seconds. Patients were treated every other day for a maximum of five treatments. If pain relief was fully accomplished prior to the completion of the five treatments, treatment was discontinued.

Results: The palliative treatment group experienced a 87.5% relief of pain, and the electroacutherapy group experienced a 75 % relief of pain. The two forms of therapy were found to be equally effective in the treatment of temporomandibular joint pain.

Detail Summary Sheet

Date: 6 Aug 84 Proj No: C-49-83 Status: Completed

Title: The Effect of Periodontal Ligatment Injection on Obtaining Adequate Local Anesthesia for Extraction of Erupted Mandibular Molars and Bicuspids.

Start Date 16 Jun 83	Est Comp Date:
Principal Investigator Michael W. Judah, D.D., MAJ, DC	Facility Dental Clinic #6, Fort Hood, TX
Dept/Svc Perkins Dental Clinic	Associate Investigators: F. L. McDonald, D.D., COL, DC
Key Words: Mandibular molars Bicuspids	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 24

Total Number of Subjects Enrolled to Date:

Date of Periodic Review n/a Results

Objective(s): To evaluate the effect of the periodontal ligament injection in obtaining adequate anesthesia for extraction of erupted mandibular molars and bicuspids.

Technical Approach: Part 1 of the study consisted of six patients requiring unilateral extraction of one mandibular molar or bicuspid. Half of the patients received an inferior alveolar nerve block and lingual and long buccal blocks as required, and the other half received the periodontal ligament injection. Part 2 consisted of patients requiring bilateral extraction of mandibular molars or mandibular bicuspids. One side received the inferior alveolar block, and the other side received the periodontal ligament injection.

Progress: The periodontal ligament injection is equally effective when compared to the inferior alveolar regional nerve block for obtaining adequate local anesthesia for extraction of erupted mandibular bicuspids. Although it is not recommended in all cases, proper case selection makes this a reliable technique for bilateral mandibular bicuspid extractions. Its use also seems to be indicated in selected cases of mandibular molar extractions.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-30-84 Status: Ongoing

Title: The Relationship of Emotional Stress to Plasma Cortisol Levels in Patients Undergoing Surgical Removal of Third Molars.

Start Date 17 Apr 84	Est Comp Date:
Principal Investigator Richard L. Parsons, D.D., MAJ, DC	Facility Darnall Army Community Hospital
Dept/Svc Dental Clinic #6	Associate Investigators: Durwood E. Bach, D.D., MAJ, DC Theodore H. Heid, D.D., COL, DC Walter F. Rigdon, D.D., COL, DC
Key Words: Cortisol levels	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 29

Total Number of Subjects Enrolled to Date: 29

Date of Periodic Review _____ Results _____

Objective(s): To attempt to quantify emotional anxiety in dental patients undergoing surgical removal of impacted maxillary and mandibular third molars and to determine its relationship to plasma cortisol levels.

Technical Approach: Patients who are treatment planned for the elective removal of two homolateral, impacted third morals and who agree to participate in the study serve as subjects. Serum cortisol is assayed at three different times: 24 hours pre-op (baseline), immediately pre-op and 15 minutes post-op. At these three times the State-Trait Anxiety Inventory (Y-1) is also administered to quantify emotional anxiety which will be correlated with serum cortisol values to determine if there is a relationship.

Progress: Twenty-nine of thirty patients required for completion of data collection have received treatment. Data analysis will commence when all laboratory reports have been received and STAI's scored.

Detail Summary Sheet

Date: 29 Oct 84 Proj No: C-33-84 Status: Ongoing

Title: A Comparison of Patient Preference for Pulp Testers.

Start Date 10 May 84	Est Comp Date:
Principal Investigator Karl K. Harris, D.D., MAJ, DC	Facility Darnall Army Hospital
Dept/Svc Department of Dentistry/Clinic #6	Associate Investigators: W. Richard Liggett, D.D., LTC, DC George P. Barnes, D.D., COL, DC Theodore H. Heid, D.D., COL, DC Walter F. Rigdon, D.D., COL, DC
Key Words: Pulp tester Caries	
Accumulative MEDCASE Cost:	Est Accumulative OMA Cost:

Number of Subjects Enrolled During Reporting Period: 20

Total Number of Subjects Enrolled to Date: 20

Date of Periodic Review _____ Results _____

Objective(s): To compare the Digital Automatic Pulptester and the Dentotest Pulptester for patient preference.

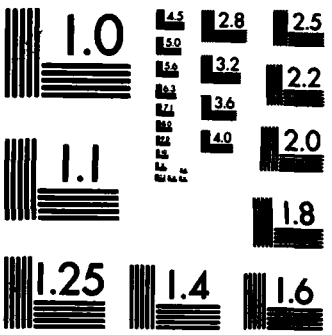
Technical Approach: The subjects were tested on paired teeth with both instruments (2 readings each instrument, for a total of 4 readings). The order of instrument use was on an alternating basis. The subjects were asked to indicate when a sensation ws felt, and the instrument was removed and the reading recorded. After recording of the 4 readings, the subjects were asked if they had any subjective preference for either instrument.

Progress: After 20 patients, the preference for the Digital Automatic Pulptester was so overwhelming (19/20) that further testing was deemed unnecessary. Statistical analysis has recently beem completed, and final results are forthcoming.

AUTHOR INDEX

AD-A157 442 DEPARTMENT OF CLINICAL INVESTIGATION ANNUAL RESEARCH PROGRESS REPORT FISCAL YEAR 1984 VOLUME 1(U) BROOKE ARMY MEDICAL CENTER FORT SAM HOUSTON TX J H ANDERSON 4/4

UNCLASSIFIED 01 OCT 84 F/G 6/5 NL



DISTRIBUTION

Commander, US Army Medical Research Command, Fort Detrick, ATTN: SGRD-AJ, Frederick, MD 21701-5000

Commander, US Army Medical Research Command, Fort Detrick, ATTN: SGRD-HR, Frederick, MD 21701-4000

Defense Documentation Center, ATTN: DDC-TCA, Cameron Station, Alexandria, VA 22314

Commander, HQ, US Army Health Services Command, ATTN: HSHN-I, Fort Sam Houston, TX 78234-6000

Superintendent, Academy of Health Sciences, US Army, ATTN: AHS-COM, Fort Sam Houston, TX 78234-6100

END

FILMED

9-85

DTIC