



Aspirin Aspirations:

Successful Aspirin Desensitization in a Pilot with Chronic Rhinosinusitis with Nasal Polyposis and NSAID Sensitivity.

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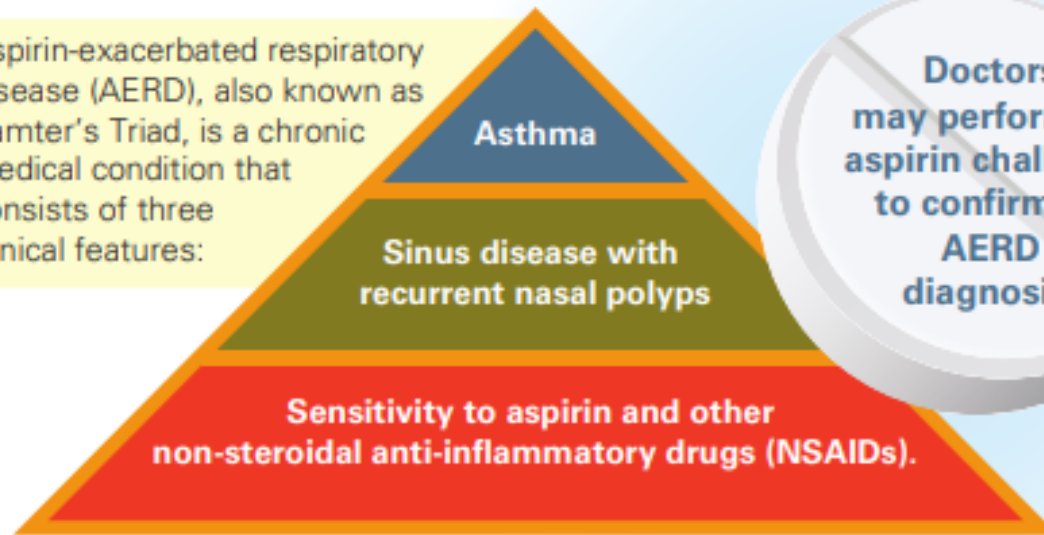
Disclosures

- None
- The views expressed are those of the presenter and do not reflect the official views or policy of the Department of Defense or its components

Introduction: AERD

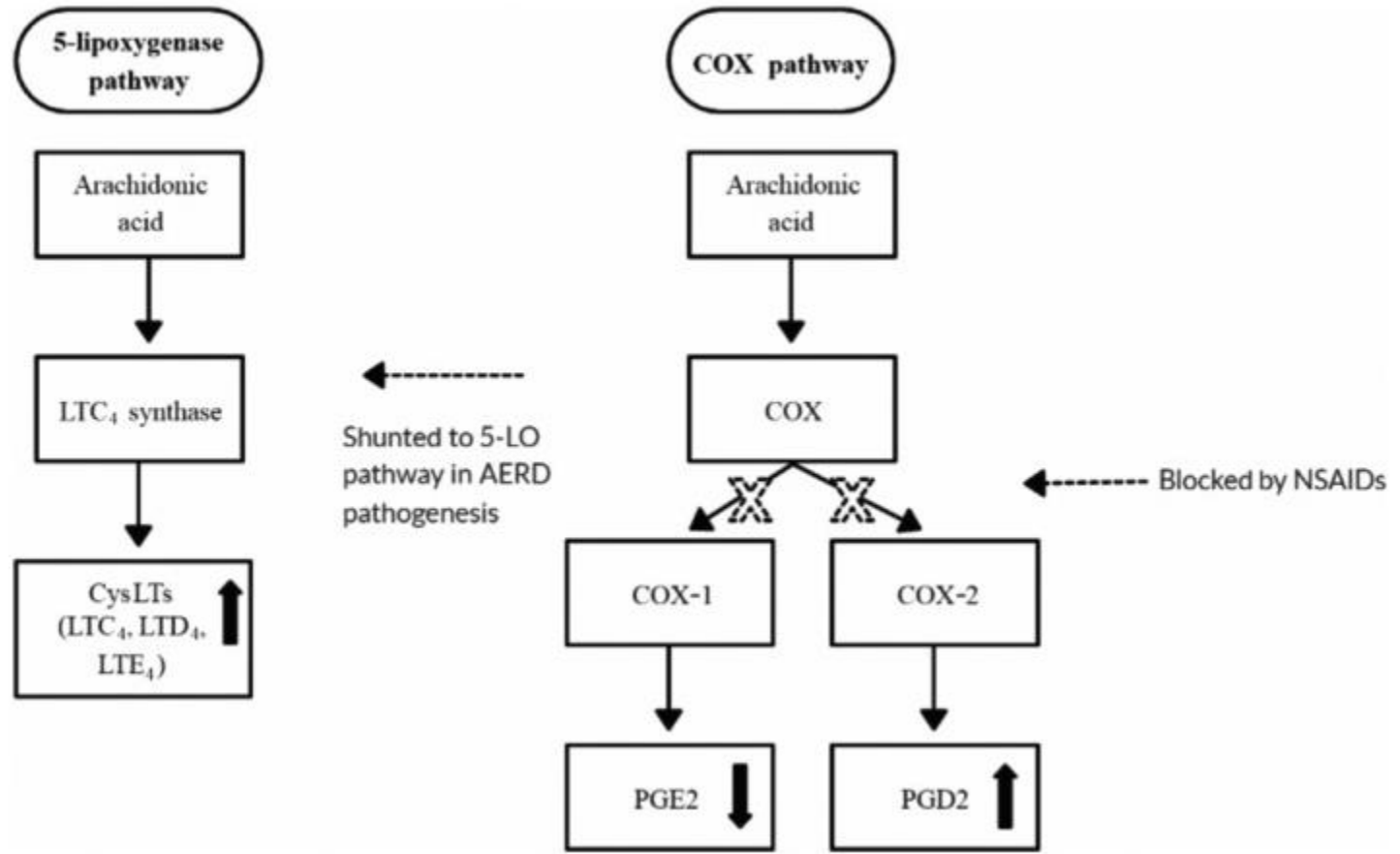
What Is AERD?

Aspirin-exacerbated respiratory disease (AERD), also known as Samter's Triad, is a chronic medical condition that consists of three clinical features:



Doctors may perform an aspirin challenge to confirm an AERD diagnosis.

Introduction: AERD



Introduction: Military Relevance



U.S. AIR FORCE

MEDICAL STANDARDS DIRECTORY (MSD)

This document reflects the current medical standards for retention, flying classes, and special operational duty for the USAF. These are the standards referenced in AFI 48-123 and are reviewed annually (at a minimum) through the Medical Standards Working Group. The Chief of Physical Standards Development at the Air Force Medical Readiness Agency is the MAJCOM/SGP point of contact for any updates. If a service member does not meet applicable medical standards, refer to AFI 48-123 for AF required actions.

- Discusses relevant disqualifying conditions
- Does not directly address biologics

Introduction: Military Relevance



U.S. AIR FORCE

Official Air Force Aerospace Medicine Approved Medications

Effective: 10 FEB 2021

(Note: This list supersedes the medication list dated 13 May 2020)

- Addresses limited biologics (adalimumab, infliximab)
- Addresses aspirin

Case Presentation

- 32-year-old male with PMH of CRSwNP and NSAID sensitivity was referred for aspirin desensitization
 - Status post multiple sinus surgeries

Baseline Evaluation

- PFTs
- NSAID sensitivity confirmation

Baseline PFTs

Volumes:						
	Units	Pred	Pre	% Pred	Post	%Change
FVC	L,btps	5.36	6.56	122 >	6.52	-1
FEV1	L,btps	4.45	4.81	108	5.23	9
FEV1/FVC	%	81	73	90	80	9

Confirmation of NSAID Sensitivity

STEP	TIME (time dose is given or when vitals are taken)	HR	RR	BP	FEV1	Lower respiratory (cough, wheezing, chest tightness, SOB) or Nasal ocular sxs (sneezing, rhinorrhea, congestion, itching, eye sxs?)
1 Spray Ketorolac	0800 0845	67	16	126/71	4.79	No symptoms at baseline 1-2/10 0830) @ FA #20g PIV placed & difficulty - Cityd
2 Sprays Ketorolac	0830 915	—	—	—		1-2/10
4 Sprays Ketorolac	0900 953	—	—	—		2/10 slight congestion
6 Sprays Ketorolac	0930 1030	—	—	—		2-3 increase in congestion 4/10 congestion 10mg zyrtec 10:52

Desensitization

ASA 60mg	1030-1130	60	14	/	4.37	2 puffs albuterol as preventive 81. drop FEV1
ASA 60mg	1200 1300 25	80	16	/	5.07	2/10 Clear lung sounds
	1525	64	14	/	4.81	
						1543) PIV O/c catheter intact, site war.
Day 2						
ASA 162mg	0800 0830	77	16	115/68	4.60	0810) BFA #20g PIV placed w/ difficulty - Ct 1/10 symptoms clear lungs at baseline
ASA 325mg	1100 1130	50	16		4.49	1/10 symptoms clear lungs
						1345) PIV O/c catheter intact, site war.

Maintenance of Desensitization

- Return to flying status
- Weaning of dosing with continued efficacy

Repeat Desensitization

- Required after holding aspirin peri-operatively

PROTOCOL: ORAL ASA CHALLENGE							
Baseline—obtain vital signs, spirometry, confirm consent signed, TNSS score							
STEP	TIME <small>(time done to prior or when vitals are taken)</small>	HR	RR	BP	FEV1 <small>(L attempt)</small>	TNSS	Comments
ASA 40.5mg	0800 0847	65	18	127/72 127/72	4.64 1.08	0	98%
ASA 81mg	0900 1024	60	18	128/78 128/78	4.74	0	98%
ASA 162mg	1100 1155	64	18	128/78 128/78	4.8	0	98%
Discharge	1400 1455 1500	54	18	106/64 106/64	4.8	0	98%
Day 2							
ASA 325mg	0950 1230						
Discharge	1440 1530						

Maintenance of Desensitization

- Remains on 325 mg QD for 5 years as of this month
- No polyp regrowth
- No requirement for systemic antibiotics or steroids in last 2 years

Discussion

- Advantages and limitations of the myriad treatments for AERD
- Cost effectiveness
- Clinical effectiveness
- Side effects
- Society guidelines
- Medical readiness

Conclusion

References

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