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TRANSLATION FROM RUSSIAN*. LESHCHINSKAYA, E. V. (1964)**. Clinical features of hemorrhagic fever of Crimean type in Astrakhan Oblast. (Abstracts of papers of the 11th Scientific Conference of the Institute of Poliomyelitis and Encephalitis). In: Tick-borne encephalitis, Kemerovo tick-borne fever, hemorrhagic fevers, and other arbovirus infections. Moscow, pp. 266-268.

The study of hemorrhagic fever of Crimean type was carried out in 1962 and 1963 in Astrakhan Oblast (76 cases).

The initial symptoms of this illness are manifested by sudden chills, headache, rheumatic pains in all the body, and vomiting not associated with intake of food, pains in the epigastric region, and lumbar pains. Duration of the febrile period averages from 7 to 9 days. The temperature curve is irregular in character with a range of 1 to 2°. In one-third of the patients on the third, fourth, or fifth day after onset of illness, a temporary drop of temperature to normal or subfebrile degree was noted.

Examination of patients during the first days of illness revealed hyperemia of face, injection of sclera vessels and conjunctivitis, bradycardia, and painfulness on palpation in epigastric area; Pasternatsky's positive sympton was sometimes noted. Enlargement of the liver and spleen are not typical symptoms of illness, but may occur in single patients.

The hemorrhagic syndrome most frequently appeared on the third or fourth day after onset of illness, but sometimes this symptom appeared on the first or second day of illness. The most constant manifestation was hemorrhagic rash of the skin and mucous; nasal, uterine, gastric and enteric hemorrhages; bleeding of the gums and mucous of the stoma, and hematuria, hemorrhagic pneumonia, and laryngeal hemorrhages were noted less frequently. During the period of hemorrhagic manifestations, with profuse hemorrhages, the skin of the patients acquires pale colour, sometimes with a slight subicteric tint; bradycardia was replaced by trachycardia, and marked hypotonia was noted. Severe cases with profused hemorrhages from various cavities comprised 25% of the total number of patients.

The duration of the period of hemorrhagic manifestation usually does not exceed 5 to 7 days. The convalescent period begins at the end of second or beginning of third week of illness.

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* This translation was made for members of the U.S. Hemorrhagic Fever Delegation to the USSR and for other interested persons.

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With unfavourable course of the illness, death occurred at the peak of hemorrhagic manifestations with a background of general intoxication, profuse blood loss, and collapse of cardiovascular activity.

In Astrakhan Oblast, of 76 patients who were ill in 1962 and 1963, 10 died. The results of patho-anatomical data revealed acute anemia of internal organs and presence within them of hemorrhages of diapedetic origin, particularly in the gastro-intestina tract (Peschansky, Vishnevetsky, G. Ya., Brumstein, M. S., and Golovin, N. F).

As regards peripheral blood, the most characteristic symptom was leukopenia: in half of the patients the number of leukocytes was less than 5000, frequently 1500-2500. Of other changes it is essential to mention thrombocytopenia and hypochromic anemia, which develop during the period of hemorrhagic manifestations.

Analysis of urine revealed frequent albuminuria, which sometimes reaches 3 to 6‰ and microhematuria. Symptoms of renal insufficiency did not occur not in a single case.

Along with typical cases, a group of 7 patients was singled out as suspected "effaced" form of illness. Two of the patients were bitten by ticks 3 or 4 days before onset of illness, while the other patients were in conditions where attack by ticks was very probable. The course of the illness proceeded with chills, epigastric and lumbar pains, vomiting, and hyperemia of the face and sclera. Examination of the patients revealed leukopenia (up to 2000), albuminuria (up to 1.65‰), and microhematuria. No other hemorrhagic manifestations were observed.

The clinical picture of hemorrhagic fever in Astrakhan Oblast was compared by us with a similar disease in Rostov Oblast, and with Central Asiatic hemorrhagic fever. In order to study the latter, we made an analysis of about 200 archive histories of this disease from various districts of Uzbek SSR. The great frequency of severe cases in Uzbek SSR may hardly serve as a reason to refer Central Asiatic hemorrhagic fever as a separate nosological entity. Nevertheless, a final solution of this question is premature at this time.

For treatment of Crimean hemorrhagic fever, we utilized convalescent sera, repeated blood transfusions, and blood substitute liquids, preparations that decrease permeability of vessles (mercury and chloride calcium), and preparations that support activity of the cardiovasscular system. Antibiotics are not effective for treatment of Crimean hemorrhagic fever.