Significance of Clinical Symptoms in Assessing the Severity and Prognosis of the Course of Crimean-Congo Hemorrhagic Fever

1. Elmurodova A. A.

Abstract: This paper presents clinical and laboratory studies of Crimean-Congo hemorrhagic fever in 18 patients in the Bukhara region in the period from 2016 to 2019. Of these, 14 (78%) were men and 4 (22%) were women. The diagnosis was confirmed by clinical and epidemiological data based on enzyme immunoassay (ELISA) for the presence of anti-IgM, which was positive in all cases. Hemorrhagic manifestations were detected in 16 (88.9%) patients, while a general blood test revealed thrombocytopenia and leukopenia in 12 (66.6%) patients. Patients also had petechiae on the skin 27%, conjunctival hemorrhage 16.6%, melena 50%, jaundice of the skin and sclera 22%.

Keywords: Crimean hemorrhagic fever, clinical features, hemorrhagic manifestations

Introduction. Currently, Crimean-Congo hemorrhagic fever occurs intermittently in many parts of Africa, Asia, and Europe, causing up to 30% of deaths [1]. Fifteen nosological forms of human hemorrhagic fever have been identified and described worldwide [2]. Of the most common hemorrhagic fevers, the least studied and significantly more severe is CCHF (acute infectious capillary toxicosis), an infectious disease caused by zoonosis, natural foci, arboviruses, with pronounced intoxication, fever, severe hemorrhagic syndrome, and 16-20% of cases. is a disease that causes up to 50% of deaths when severe. The description of changes in laboratory parameters in CCHF is very limited and uncertain, changes in the blood coagulation system, and in particular the state of platelet hemostasis, have not been adequately studied. The study of these indicators is an evaluative criterion in assessing the severity of the patient's condition and the choice of treatment tactics in hemorrhagic fever [3, 4, 5].

The prognostic criteria for severe CCHF are: primary affect, pronounced intoxication, multiple hemorrhagic rash, recurrence, diarrhea, bleeding from the oral cavity, encephalopathy, thrombocytopeny, thrombocytopeny, leukopenia and early stages of the disease [6, 7].

Aim. The aim of this study was to investigate the clinical features of CCHF according to the presence of hemorrhagic syndrome.

Materials and methods. In the territory of Bukhara region from 2016 to 2019, 18 patients aged 18 to 55 years, registered with the diagnosis of CCHF, underwent clinical-laboratory retrospective analysis. Of these, 14 (78%) were men and 4 (22%) were women. The diagnosis was based on clinical-
epidemiological data and the output of anti-IgM in immunoenzyme assay (IFT), which gave a positive result in all patients.

Patient complaints, general and biochemical blood tests were examined: aspartate aminotransferase (AsAT), alanine aminotransferase (AlAT), bilirubin, cholesterol, total protein, protein fractions, creatinine, urea, glucose, coagulogram, fibrinogen, PTI were detected. analyzed.

**Research results and discussion.** Most of the patients under supervision live in rural areas and work in desert areas. Their labor activity is inextricably linked with animal husbandry. Primary affect was detected at the site of the tick bite in 50% of patients. In cases of primary affect, the disease is more severe: the duration of the fever (2 days) and prolonged symptoms of intoxication (3 days), high fever (22.2%), hemorrhagic syndrome, thrombocytopenia and DVS-syndrome are often noted. Complications are twice as common in patients with primary affect.

When patients applied, high body temperature, chills, and headache were detected in 83.3% (n = 15) of them. The duration of this period is 1 to 3 days and is called the pre-hemorrhagic period. After 3–5 days, 14 patients (77.7%) developed symptoms of hemorrhagic syndrome, such as excessive bleeding from the nose, bruising at the injection site (11.1%), bleeding from the gums (5.5%). In addition, symptoms such as petechiae on the skin of patients 27.7% (n = 5), conjunctival hemorrhage 16.6% (n = 3), melena 50% (n = 9) were also noted. In addition to the symptoms of hemorrhagic syndrome, recurrence was detected in 38.8% (n = 7), diarrhea in 50% (n = 9), and changes in the appearance of hyperemia of the laryngeal mucosa in 16.6% (n = 3). In 4 (22.2%) patients, yellowing of the skin and discoloration of the urine occurred. Hepatomegaly was observed in 12 (66.6%) patients. Changes in the blood during the outbreak of the disease are of particular importance. Hemorrhagic symptoms were observed in 16 (88.9%) patients, and thrombocytopenia and leukopenia were observed in the general blood test in 12 (66.6%) patients during the same period. In the biochemical analysis of blood, an increase in bilirubin due to the correct fraction, an increase in the activity of aspartate aminotransferase (66.6%, n = 12), alanine aminotransferase (77%, n = 14), fibrinogen (66.6%, n = 12) and PTI (72.2%) , n = 13 was found to decrease. An increase in the amount of biochemical markers indicates the degree of functional impairment of hepatocytes.

**Conclusion.** Thus, Crimean-Congo hemorrhagic fever was often accompanied by hemorrhagic symptoms and was manifested in 22% of cases by jaundice in the skin lining and sclera. The modern course of clinical signs of CCHF means that disorders in the hemostasis system are the leading factor influencing the pathogenesis and duration of the disease, the outcome.

**Literature:**
