

Clinical and Ocular Manifestations in A 58 Years Old Male With Creimea Congo Hemorrhagic Fever In Ablania

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Abstract

Crimea Cong Hemorrhagic Fever (CCHF) is a fatal virus infection. The incidence of Crimea Congo Hemorrhagic Fever has increased in this last 10 years particularly among people that live in north of Albania, especially in Kukes and Dibra. This case report is a fatal case of Crimea Congo Hemorrhagic Fever observed in Albania. The patient was observed for clinical and ocular manifestation and the diagnosis was confirmed by PCR-transcription in the Public Health Institute in Tirana.

KEYWORDS: Crimea Congo Hemorrhagic Fever, Ocular manifestation, Case report, Albania

Introduction:

Crimean-Congo hemorrhagic fever (CCHF) is a tick-born disease caused by a *Nairovirus* of the Family *Bunyaviridae*. Infection is transmitted to humans by *Hyalomma* ticks or by direct contact with the blood or tissues of infected humans or livestock (Ergönül, 2006). Clinical features usually include a rapid progression characterized by hemorrhage, myalgia and fever, with a mortality rate of up to 30% (Appannanavar & Mishra, 2011).

CCHF virus has a wide geographic distribution, circulating in Africa, the Middle East, Asia, and Central and South-Eastern Europe (Lindenbach BD, Rice CM, 2001) . The Balkan is an endemic region for, sporadic cases are observed every year.

In Albania eight cases of Crimean Congo hemorrhagic fever were found in Albania in 2001 (Papa et al., 2002). Seven of these cases were laboratory confirmed. In this study we will see the clinical and ocular manifestation of a case report in a fatal case of Crimea Congo Hemorrhagic Fever.

Case report:

A 58 years old man that lives in Kukes, Albania was presenting in April 2001 in the Regional Hospital of Kukes. The man was presented with myalgia, cough, nausea, vomiting and headache. The doctors give an ambulatory care to the patients with antibiotics and antipyretics. Three days later the patients was taken to Mother Teresa Hospital in Tirana because his condition was worse. The patient was recovering to the department of Infective disease in May 2001 as a case that does not respond to the therapy.

As the patients came from an endemic zone, the doctor recommended the laboratory value, and the hospitalization in a different room. In the time that the patients were presented to the clinic he has cough, vomiting with blood, headache, and pain in all the body and red eyes. He reported history for Type 2 Diabetes Mellitus and Hypertension. His temperature was 39.6°C, with a pulse 98 beats/min. His blood pressure was 170/110 mmHg and the respiratory rate was 34 breaths/min.

The blood value shows a low level of hemoglobin with 10.2 gr/dl (normal value 13.5-17.5 mg/dl) and thrombocytopenia was noted with 46.5×10^9 /liter (normal value $140 \times 10^9 - 400 \times 10^9$ /liter). Laboratory shows an elevation of liver enzymes.

The patient history indicated a contact with livestock.

The patient was treated with intravenous antibiotics and corticosteroids and a sample of blood was take for analysis in the Institute of Public Health in Tirana. It was found a positive IgM and RNA for the Virus of Crimea Congo Hemorrhagic Fever by ELISA and polymerase chain reaction (PCR) methods.

One day later the patients developed epistaxis and gingival bleeding with an aggravate thrombocytopenia. A bilateral subconjunctival hemorrhage was seen and in the left eye the patient had a retinal hemorrhage. At the abdominal echo it was shown a hepatosplenomegaly and hemoperitoneum.

One week later the temperature was 38.7°C, the respiratory rate was 32 beats/min and the thrombocytes was 43.5×10^9 /liter (the patient had an infusion of fresh platelets every day). An anterior uveitis was seen in the patient, with decrease of the visual acuity in both eyes. The erythrocyte level and hemoglobin level decreased. Hematemesis, melena, epistaxis and petechiae was seen.

Supportive therapy was given to the patient during with hydration, antibiotics, control of temperature and blood transfusions, until a blood sample was referred to Ljubljana to confirm the diagnosis of Crimea Congo Hemorrhagic Fever.

Treatment with Ribavirin was start but the patient died on 28 May 2001 from hemorrhagic shock.

Conclusion:

From this case report, we can see that the late diagnosis decreases the possibility to treat and to prevent the aggravates of the disease. The early diagnosis of Crimea Congo Hemorrhagic Fever is very important to prevent the spread of the virus and to treat the patient. The treatment in the late stage of the disease it's not useful.

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