Letter to Editor

Clinical manifestation and pathophysiology of Crimean-Congo hemorrhagic fever on human

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Dear Editor:

The Crimean-Congo hemorrhagic fever is a febrile and acute viral disease, and it is sporadic and epidemic in human societies, although it is special for animals (1). The disease was first identified in the Crimean Peninsula in the years 1945-1944 and was called the Crimean Hemorrhagic Fever. In 1956, the epidemic of the disease in the Congo also occurred, and due to the similarity of the disease agent, the combination of names of these two regions was used for naming the disease (2). The cause of this disease is a single-stranded viraemia virus from the genus Neurovirus and the Bunyaviridae family (3). One of the ways to transmit the disease is tick bites, and the hyaloma ticks are the most important constituent of the Crimean-Congo fever vein and the reservoir. In addition to transmitting the disease to vertebrates, due to a vertical and horizontal transmission, they transmit it to the next generation (4). Also, human contact with meat, blood and contaminated secretions of livestock in a livestock eradication period causes the transmission of the disease (5). Human to human transmission, which is more often seen as a hospital infection, is also a means of transmitting the disease (6). The incubation period after a tick bite is 1 to 3 days and a maximum of 9 days, and is slightly longer after contact with contaminated blood or tissue about 5-6 days, and finally 14 days (7). In the early stages of the disease, symptoms are sudden which include severe headaches, fever, chills, muscle pain, especially the back and leg muscles, neck stiffness, dizziness, reddening of the eyes, fear of light, nausea, vomiting and diarrhea. Then, a severe generalized muscle pain appears, mostly at the back and hamstring, and the patient complains of back pain and epigastric pain (8). In the examination of patients, facial flushing and chest thigtness, hyperemia of throat mucusand petechialsare common symptoms which draw attention. Hemorrhagic phenomena include melena, hematuria and bleeding from the nose and gums and the uterus, and sometimes the bloody sputum and subconjunctival hemorrhageand bleeding of the ear may occur after petechiae. Sometimes a patient suffers from severe thirst, dullness, back pain and agitation, and respiratory distress may also occur due to pulmonary hemorrhage. Also, because the virus affects the reticuloendothelial system, hepatosplenomegaly, liver tenderness, spleen tenderness and epigastria is seen. Significant cardiovascular disorders in the Crimean fever include heart rate, low blood pressure, leucopenia, and thrombocytopenia (9). With the severity of the disease progressing, the bleeding is intensified and the patient loses a lot of blood, and therefore there first appears the shock, then the renal and hepatic failure, as well as the disorder of breathing and cardiac arrest occurs, and ultimately the death of the patient occurs through disseminated intravascular coagulation (10).

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4. Reference

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