Crimean-Congo Hemorrhagic Fever

Crimean–Congo hemorrhagic fever (CCHF) or simple Congo fever is a widespread tick-borne viral disease in all over the world. The virus which is responsible of this disease belongs to the Bunyaviridae family of RNA viruses. It is a zoonotic disease carried by several domestic and wild animals. The virus is primarily transmitted to people from ticks and livestock animals. Human-to-human transmission can occur resulting from close contact with the blood, secretions, organs or other bodily fluids of infected persons.

SIGNs AND SYMPTOMS

Typically, after a 1–3 day incubation period following a tick bite (5–6 days after exposure to infected blood or tissues), flu-like symptoms appear, which may resolve after one week. In up to 75% of cases, however, signs of hemorrhage appear within 3–5 days of the onset of illness in case of bad containment of the first symptoms: mood instability, agitation, mental confusion and throat petechiae; and soon after nosebleeds, vomiting, and black stools. The liver becomes swollen and painful. Disseminated intravascular coagulation may occur, as well as acute kidney failure, shock, and sometimes acute respiratory distress syndrome. Patients usually begin to show signs of recovery after 9–10 days from when symptoms presented. However 30% of the cases result in death by the end of the second week of illness.

DIAGNOSIS

Crimean–Congo hemorrhagic fever is diagnosed by using tests like ELISA, isolation of the virus, antigen detection, and polymerase chain reaction. The patient is treated with intravenous fluids and an antiviral drug Ribavarin.

PREVENTIONS

Where mammalian tick infection is common, agricultural regulations require de-ticking farm animals before transportation or delivery for slaughter. Personal tick avoidance measures are recommended, such as use of insect repellents, adequate clothing and body inspection for adherent ticks. When feverish patients with evidence of bleeding require resuscitation or intensive care, body substance isolation precautions should be taken. Adequate precautions should be taken to avoid being infected in epidemics. People exposed to domestic animals or those undergoing activities like hiking should wear protective gear to avoid tick bites. Hospital staff should also take adequate precautions while treating patients with the disease. Ribavarin may be administered to people coming in close contact with patients.

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