EDITORIAL

CRIMEAN-CONGO HEMORRHAGIC FEVER: AN EMERGING DILEMMA IN PAKISTAN

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Crimean-Congo hemorrhagic fever (CCHF) is caused by an RNA virus of Bunyavirade family. This virus was first found in Crimean Peninsula in 1944. After several years in 1969, it was found in Congo region of Africa causing the same illness i.e. hemorrhagic fever. Hence it was named as Crimean-Congo virus. It is much more prevalent in African, Asian and European countries.[1]

Crimean-Congo hemorrhagic fever is a zoonotic disease carried by many domestic and wild animals e.g. sheep, cows, and buffaloes, however infected animals rarely have a clinical disease. Human beings get infected either by direct contact with the blood of infected animals or by the bite of infected ticks. Persons working in dairy farms and veterinary dispensaries are at a greater risk. Properly cooked meat of an infected animal does not transfer the disease as cooking kills all the viruses. Patients may present with vague symptoms such as sudden onset high grade fever, myalgia, neck pain and stiffness, headache, backache, photophobia, nausea, vomiting, diarrhea, abdominal pain and sore throat. There may also be bleeding, confusion and coma.[1]

Congo virus can be diagnosed by different laboratory investigations such as enzyme linked immunosorbant assay (ELISA), virus isolation by cell culture and reverse transcriptase polymerase chain reaction (RT-PCR). Patients with Congo virus can be managed by supportive measures (intravenous fluids) and use of antiviral drug ribavirin.[1]

CCHF is an emerging zoonotic disease in India and Pakistan. In a study from India, samples of clinically suspected human cases from different areas of northern-western India were tested for the presence of CCHFV by RT-PCR through amplification of nucleocapsid (N) gene of CCHFV. Positive samples were sequenced to reveal the prevailing CCHFV genotypes and phylogenetic relatedness. Phylogenetic tree revealed the emergence of diverse strains in the study region showing close resemblance with strains in Pakistan, Afghanistan and Iran, which was different from earlier reported Indian strains.[2]

Viral hemorrhagic fever caused by Congo virus and dengue virus is endemic in Pakistan. Both Congo fever and dengue fever can occur simultaneously and this results in major problem in patient placement and treatment in the hospital. Rapid identification of positive cases together with screening out of suspected Congo virus cases which are Congo virus negative have implications for management in the hospital in terms of risk of transmission, nursing and infection control.[3]

A study conducted in Pakistan has shown that the level of knowledge regarding viral hemorrhagic fever was different in different categories of healthcare personnel like doctors, nurses and paramedics.[4]

For the elimination of ticks, the animals should be sprayed. Bright clothes and gloves should be worn for easy identification and prevention of direct contact with ticks. Normal persons should stay away from the victim of Congo virus. Patients should be kept in isolation until they are properly and completely treated.[1]

The death toll from CCHF in Pakistan has been reported to be nineteen by mid August 2016, with five deaths reported in Karachi, twelve in Quetta and two in Bahawalpur and is increasing with the passage of time. It is suggested that preventive steps should be taken immediately by the health authorities to prevent epidemic of this deadly infection.

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CONFLICT OF INTEREST
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