LETTER TO THE EDITOR

Crimean-Congo Haemorrhagic Fever: Breaking the chain of transmission

Muhammad Ateeb Shaikh, Sahar Safder, Shaheen Ayoob Bhatty

Madam, Crimean-Congo Haemorrhagic Fever (CCHF) is labeled as the highest alert infectious disease by National Institute of Health, Islamabad due to its peak incidence in summer and spring. In Pakistan, 69 cases were confirmed in last year up till November[1] and there were 183 confirmed cases between 2011 and 2013.[2] During last four years, 35 deaths were declared due to Crimean-Congo Haemorrhagic Fever (CCHF).[1,2]

CCHF, with fatality rate up to 50%, is caused by a tick-borne Nairo virus of the Bunyaviridae family, hosted by domestic animals like sheep, goat and cattle, which get infected by vector tick bites. Humans acquire the infection by tick bite, through contact with blood or tissue of an infected animal, another affected human or lack of standardized sterilization practices in hospitals. Signs and symptoms include headache, high grade fever, muscular pain, and in advanced stages, purpuric rash, epistaxis and bleeding from other sites.[3]

Factors which likely contribute to spread of the virus among domestic animals are insanitary state of breeding places and slaughter houses, failure to appreciate the importance of animal hygiene and keeping them tick-free and breeding them close to wild animals. Lack of awareness about tick-borne diseases among breeders, butchers and public add to its spread in humans. There's no recommended vaccine available for its prevention in humans or animals. The only effective effort could be to take measures to stop its spread. Steps are needed to maintain hygiene in the pre-designated markets, making sure that animals are tick free by using Acaricides (pesticides which kill ticks and mites) or atleast observed to be tick free for fourteen days before being slaughtered.

Educating public about transmission of virus through print and electronic media, topical use of insect repellents containing N, N-Diethyl-meta-toluamide and avoiding close contact with the diagnosed and suspected patients will help in limiting the spread. Butchers should be encouraged to wear protective clothing while slaughtering the animals and handling meat. Practicing safe burials of infected deceased and safe disposal of animal vestiges need to be highly stressed. Housewives should wear rubber gloves for cleansing meat at home. In hospitals, patients with history of high grade fever, haemorrhagic symptoms and platelet count below 50,000/mm^3 should be tested for CCHF with ELISA or PCR.[4] Healthcare providers must follow strict barrier techniques and safe handling of specimen from the patients. Use of Ribavarin for prophylaxis may further be studied.[5]

Dow University of Health Sciences, Karachi.
Correspondence: Sahar Safder. Email: saharsafder@yahoo.com

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