Abstract

Crimean-Congo Hemorrhagic Fever Outbreak in the North Region of Oman in August 2019: Case Series Study

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Abstract

Background: Crimean-Congo hemorrhagic fever (CCHF) is a viral zoonotic tickborne disease that has been linked to a high mortality rate in a number of nations. In Oman, the first case of CCHF was discovered in 1995. The Directorate of Disease Surveillance and Control received reports of four individuals with CCHF from various places in Northern Oman between August 17 and August 23, 2019 (during the Eid Adha festival).

Objective: The aim of this study was to identify CCHF patients, determine the source and mechanism of transmission, and recommend preventive measures to avoid further outbreaks.

Methods: We arranged for a field visit with teams from the Ministry of Agriculture, Fisheries and Municipality on the same day of notice (August 23-17, 2019) in the region, and a case series study was undertaken using a semistructured questionnaire.

Results: The findings revealed that all of the patients were men (three were Omanis), ranging in age from 40 to 55 years. Three of the patients worked in slaughterhouses, and all patients had close contact with raw sheep tissues. Fever and gastrointestinal problems were the most common symptoms, with a case fatality rate of 25%. Late bleeding signs and coagulopathy were detected in the patient who died.

Conclusions: The causative agent was most likely CCHF virus, and the source of the outbreak was infected imported sheep through direct contact with contaminated biological tissues, based on symptoms, signs, lab tests, and the incubation period. All imported sheep must be tested and flagged at the main gates of the three ports in Oman's north region.

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KEYWORDS

CCHF; outbreak; slaughterhouse; sheep; patient

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