

1 ZONOTIC AND VECTOR-BORNE DISEASES

a Crimean-Congo haemorrhagic fever in the Western and Northern Cape provinces

Two cases of Crimean-Congo haemorrhagic fever (CCHF) were confirmed in the first week of January 2017. The first case, a 53-year-old farmer from Mamre, Western Cape Province, became ill on 22 December 2016 with abrupt onset of fever, headache, back pain and gingival bleeding. He was referred to the secondary level referral hospital in Cape Town with a differential diagnosis of severe pancreatitis or thrombotic thrombocytopenic purpura. With progressive gastrointestinal bleeding and ecchymoses, he was transferred to the tertiary referral hospital with supposed severe intra-abdominal sepsis and DIC. He entered the convalescent phase on day 9, and 5 days later, following a review of negative laboratory results, the diagnosis of CCHF was considered and subsequently confirmed by the NICD; CCHF IgG IFA positive (titre of 1000), CCHF IgM IFA positive (titre of 100), CCHF PCR was weakly positive at a cycle threshold of 38. In retrospect, he remembered a small red tick firmly embedded in his leg three days prior to symptom onset. The patient grazes his goats in the communal lands where cattle owned by different farmers are herded and roam amongst his animals. Over 200 HCW and family contacts were monitored for symptoms up to 14 days post-exposure, but no secondary transmission occurred.

The second case involved a 58-year-old male sheep farmer from Van Wyksvlei, a small town near Carnarvon, Northern Cape Province. The patient developed malaise, headache, myalgia and epigastric pain early January 2017. He was treated with doxycycline by his general practitioner but when his clinical condition failed to improve, he was admitted to hospital in Kimberley. Findings included severe thrombocytopenia (platelets= $5 \times 10^9/L$) with

bleeding and petechial rash, and significantly raised liver transaminases (ALT=589 IU/L and AST=2616 IU/L). The patient died on 8 January 2017 following a gastrointestinal bleed. The diagnosis was confirmed by CCHF RT PCR and no anti-CCHF serological responses were detected. Monitoring of 17 contacts continues at the time of this report.

Two additional suspected cases of CCHF underwent testing at CEZD, during late December 2016 and early January 2017, each of whom presented with bleeding and hepatitis. However, a diagnosis of staphylococcal septicaemia and disseminated herpes simplex virus was made respectively, and tests for CCHF virus were negative.

Since 1981 202 cases of CCHF have been confirmed in South Africa. Cases are mostly reported from the semi-arid Northern Cape and Free State provinces, although cases have been reported from all nine provinces of South Africa. More than two-thirds of cases diagnosed in South Africa report a definitive tick exposure history. The virus may also be transmitted through contact with infected animal blood or tissues – various livestock and wildlife species may be infected with the virus although they do not develop disease. The virus is transmissible from person to person through contact with virus-containing bodily fluids such as blood and saliva; however strict infection prevention and control procedures can prevent transmission.

For more information on CCHF in South Africa visit www.nicd.ac.za

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