d Crimean-Congo haemorrhagic fever

Crimean-Congo haemorrhagic fever (CCHF) was confirmed in a 25-year old male from Wepener, Free State Province. The patient was reportedly bitten by ticks before falling ill. The patient was originally clinically diagnosed with tick bite fever, but in the absence of favourable response to doxycycline treatment and considering the clinical presentation of the patient, an alternative diagnosis of CCHF was considered.

Blood results collected around day four after symptom onset revealed thrombocytopenia (39X 109/L) and raised liver transaminases (AST 94 IU/L; ALT 105 IU/l). Two consecutive blood specimens were collected and submitted for CCHF investigation at the NICD. Both specimens tested positive for CCHF by real time reverse transcription PCR and serology: One specimen tested anti-CCHF IgM positive and the second positive for anti-CCHF IgG and increased level of anti-CCHF IgM antibodies. The patient had no haemorrhagic manifestations, and made an uneventful recovery. No secondary cases have been reported.

This case is the first confirmed case in 2015, and the 200th human case of CCHF from South Africa confirmed by the NICD from 1981 to date. Cases of CCHF have been reported from all nine provinces of South Africa, but predominantly from the Free State, Northern Cape, North West and Western Cape Provinces (Figure 3). Contact with ticks, either by bites or through squashing of ticks (whilst removing them) have been most frequently implied as the route of exposure of patients confirmed with CCHF in South Africa. The virus may also be transmitted, albeit less frequently, by contact with infected blood and tissues from infected animals. Nosocomial transmission in South Africa has been recorded on four occasions since the disease was originally reported in the country.

Amongst South African cases, the mortality rate of CCHF ranges from 5-30%. Presentation may vary greatly from mild disease to fulminant haemorrhagic manifestation. The disease typically includes sudden onset of fever with muscle aches, back ache, headache and photophobia. Sore throat, nausea, vomiting, swollen glands, abdominal pain may also be present. This may progress to include haemorrhagic findings such as petechial rash, ecchymosis, purpura and other forms of bleeding. There is no specific treatment for CCHF, and management is mainly supportive. The efficacy of ribavirin treatment has been the subject of much contention, but it may be useful during the early stages of the disease.

Source: Division of Public Health Surveillance and Response, Centre for Emerging and Zoonotic Diseases, NICD-NHLS