

3 VECTOR-BORNE DISEASES

a Fatal tick bite fever

Another case of fatal tick bite fever was reported to the NICD in the past month. A 56-year-old male was admitted to a Tshwane hospital with a history of fever for one week and confusion. A typical eschar was noted on the patient's chest, and after admission to hospital he developed a generalised maculopapular rash which included lesions on his palms and soles. Thombocytopenia (platelet count of $34 \times 10^9/L$) was noted, with bleeding from venepuncture sites. Transaminasemia was remarkable, with AST and ALT peaking at 64 000 U/L and 12 000 U/L respectively. The patient suffered three cardiac arrests and died a few days later. He lived on a smallholding located in Kameeldrift, northeast of Pretoria, and reported the presence of many ticks on the property and recent tick infestations of his dogs. He also reported finding a tick

in his bed some time before falling ill. Crimean-Congo haemorrhagic fever was considered as a possible diagnosis given the patient's clinical presentation and history of exposure to ticks, but was excluded by serology and PCR tests. Rickettsia serology did not provide definitive evidence for a diagnosis of tick bite fever, with *Rickettsia conorii* IgG testing positive at 1:80 but IgM negative. Rickettsia PCR performed on DNA extracted from a whole blood specimen and the eschar swab tested positive, confirming the diagnosis of tick bite fever.

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