

ZOONOTIC AND VECTOR-BORNE DISEASES

An update on rabies in South Africa

In 2019, rabies was laboratory confirmed in 10 persons in South Africa. These cases were reported from Limpopo (n=2), KwaZulu-Natal (n=4) and Eastern Cape (n=4) provinces. In addition, six more deaths were classified as probable rabies cases, three each from KwaZulu-Natal and Eastern Cape provinces. Since our last report (Communicable Diseases Communiqué, December 2019, Vol. 18(12)), two new probable rabies cases have been reported, and are described below.

In the first case, a 52-year-old woman was bitten by her own dog in Mthatha, Eastern Cape Province, on 15 November 2019. She sustained injuries to her leg and eye. The dog, which was unvaccinated against rabies, was killed after the bite incident but not tested for rabies. The woman died in hospital after a short illness on 6 December 2019. She had clinical signs suggestive of rabies, notably excessive salivation. Rabies vaccine was reportedly administered after the bite. Diagnostic testing was not performed as nasal secretions from the patient were received. This was not an appropriate sample for rabies detection. Suitable ante-mortem specimens for rabies testing include saliva, nuchal skin biopsy and cerebrospinal fluid (CSF). Submitting a full range of specimens for a suspected rabies case is recommended.

In the second case, KwaZulu-Natal Province recorded another rabies probable death in late January 2020, in a 36-year-old man who had sustained a bite on his arm from a stray dog in the eThekweni District area on 18 September 2019. He sought medical care at the local clinic but did not go for rabies post-exposure prophylaxis at the referral hospital. Prior to his death, on 21 December 2019, he presented with symptoms compatible with rabies, including headache, vomiting

and difficulty in breathing, confusion, hallucinations, restlessness, hypersalivation and hydrophobia. A post-mortem examination was not conducted.

The most common source of human rabies in South Africa is from dogs and is due to infection with the classic rabies virus. The Animal Diseases Act, 1984 (Act No.35 of 1984) requires that all domestic dogs and cats in South Africa be vaccinated against rabies, twice in the first year with a booster vaccine every three years.

The risk of rabies from the bite of a wild animal, although rare, is not often recognised. Bat bites in particular can be small and go undetected. Exposures to bats are considered category 3 exposures in all cases, regardless of whether there are visible injuries or not. With every bat exposure, rabies immunoglobulin and vaccination should be provided. Bats are considered an uncommon source of human rabies in Africa, with two confirmed cases in South Africa, a farmer in 1970 in Limpopo Province, and a tourist visiting North West Province in 2006. An additional case was confirmed in a visitor to Kenya exposed to a bat in 2007. All three patients were infected with the Duvenhage virus, a rabies-like lyssavirus and most likely linked to an insectivorous bat. Two other lyssaviruses have been detected in bats, Mokala and Lagos bat viruses, but no human cases have been reported.

For more information on rabies and rabies post-exposure prophylaxis following dog bites and other animal exposures, visit www.nicd.ac.za.

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