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Clinical report

Dog rabies: the first case reported from Sultanate of Oman

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Background: There has been no report of dog rabies in Sultanate of Oman, possibly due to an inadequate active and passive surveillance and response system.
Methods: We recently developed Fluorescent Antibody Test (FAT) and real time polymerase chain reaction (PCR) as a sensitive diagnosis of rabies.
Results: We present the first laboratory proven canine rabies case in Sultanate of Oman. Laboratory facilities for sensitive diagnosis are now available in Sultanate of Oman.
Conclusion: A systematic surveillance system for rabies in domesticated dogs will have a good influence on the control of this zoonotic infection in Sultanate of Oman.

Keywords: Canine rabies, dog rabies, Sultanate of Oman

Rabies is presently considered as a re-emerging zoonotic disease throughout much of the world. As many as 50,000 potentially preventable human deaths occur each year in Asia, Africa, and Latin America making it a disease of public health concern.

In the Sultanate of Oman, rabies has been reported in cattle, goats, sheep, camels, and foxes [1]. The Red fox (vulpes vulpes) is the main source. This report is the first documented case of dog rabies in Oman.

An adult stray dog in the Musanaa district 60 km off the north coast of the Oman capital, unprovoked, attacked a cow. The dog showed furious manifestations at the time of the attack. Eventually it was killed by the cow's owner.

At necropsy examination, the brain appeared congested. Examination by fluorescent Antibody Test (FAT) [2] was positive for rabies antigen. Subsequently, a polymerase chain reaction (PCR) was done at the Veterinary Research Center, which also showed positive results for fragment of rabies virus, as seen in **Table 1**. [3].

Rabies may be expanding its range in the Sultanate of Oman. Therefore, a transition from a predominantly fox problem to one in owned and stray dogs must be anticipated. Local veterinary laboratories must be prepared to provide World Health Organization standard testing facilities. A systematic surveillance and control system to control this zoonotic infection should be carefully planned, implemented, and evaluated.

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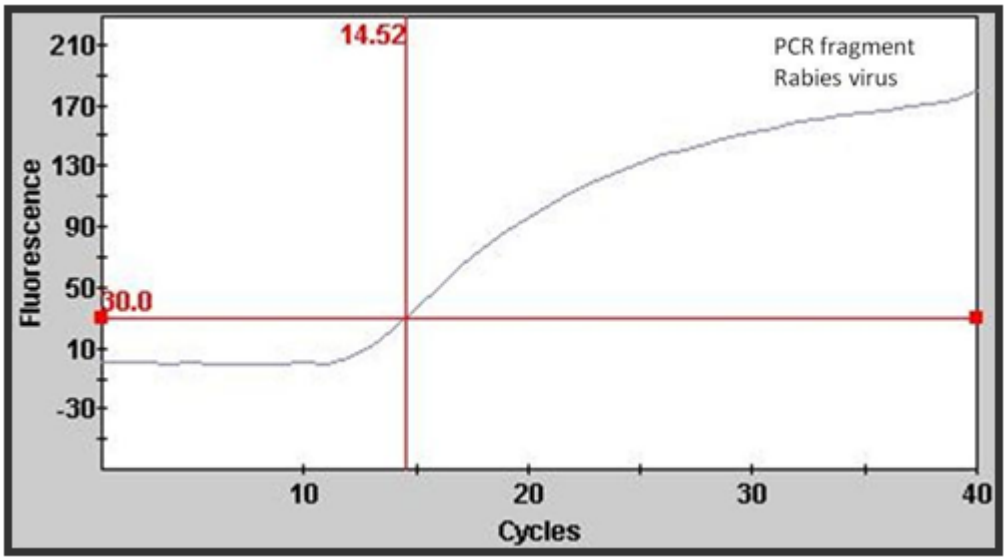
Table 1. The Real time PCR (SBR-Green) showing a positive result



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