



TRANSPLACENTAL TRANSMISSION OF RABIES

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Rabies is an acute viral encephalitis. In India more than 95 percent of rabies cases are transmitted by dog bite (Saseendranath, 1996). In this paper a few cases of intrauterine transmission of rabies are reported.

One cross bred Holstein Friesian heifer at six months of pregnancy from Anthikad, was reported of having salivation and frequent bellowing since three days. On examination the animal was having hyperesthesia, unprovoked attacking but active and alert. There was frequent urination. History of dog bite was not traceable. The animal was having a temperature of 104.6°F and showed an attacking tendency. The salivary smear and corneal impression were subjected to FAT but no fluorescence could be detected. On fourth day animal became paralytic and showed symptoms of abortion. The animal died on fifth day of presentation. The brain impressions from both dam and foetus were detected positive for rabies by FAT (CDC-2003).

One two-year-old Malabari Goat, three months pregnant was presented with the history of off feed and staggering gait from Triprayar, during October, 2003. The animal was having frequent urination and swaying of hindquarters. It was reported that 20 days back, the animal was bitten by an unknown dog. The next day animal became paralytic, there was lateral kinking of head and off feed. Pupil was dilated and unresponsive to light. Animal died on the third day and on brain impression examination by FAT both dam and foetus was found positive for rabies.

One three-year-old crossbred heifer, two months pregnant (58 days) from Cherumkuzhy, Thrissur district, Kerala was admitted to the University Veterinary Hospital, Mannuthy during January, 2004. The animal was showing attacking tendency since the day before and was off feed for the past three days. On examination animal was having salivation

and frequent urination and hyperaesthetic frequent lying down and getting up. Animal died on the next day after admission. The fetal brain was found negative for rabies while that of dam was positive by FAT.

A cross bred goat aged four years, 45 days pregnant, was brought from Koottala, Peechi, Thrissur to the University Veterinary Hospital, after showing symptoms suggestive of rabies, salivation and sneezing during February, 2004. No history of dog bite was available but the owner recollected the presence of a wound on its cheek about two weeks back. The goat died on the same day. The fetal brain was negative for rabies in FAT while dam was positive for rabies.

Though the main route of transmission of rabies is bite of infected animals, the present study indicates that rabies can also be transmitted transplacentally to the foetus except during early pregnancy. As the embryo during early pregnancy is not having fully developed nervous system and lack of hematogenous spread of rabies virus could be the only reason which can be attributed to the negative finding in early pregnancy.

Summary

Four cases of rabies in two heifers and two goats are described. It was observed that transplacental transmission of rabies is possible especially if the foetus crosses the mid gestation.

References

- Testing-A Minimum Standard for Rabies Diagnosis, CDC (2003).
- Saseendranath, M.R., Epidemiology of Rabies, *JIVA* (1996) 1:15-17.

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