

Indian J. comp. Microbiol. Immunol. infect. Dis.,
Vol. 5, No. (1), March 1984.

A CASE OF RABIES IN A CAPTIVE RHINOCEROS (*R. unicornis*)

S. C. Mukherjee, R. K. Das¹, B. M. Arora², M. L. Mehrotra

Division of Pathology
Indian Veterinary Research Institute
Izatnagar-243 122 (U. P.) India

There is only a single report of clinically suspected case of rabies in an Indian rhinoceros (*R. unicornis*) (Das, 1968). The present report is to place on record a clinically suspected case of rabies in a 8 year old female rhino, at Prince of Wales Zoological Garden, Lucknow, India, which was subsequently confirmed by biological test and histopathological examinations.

The clinical symptoms included off-feed, restlessness, salivation with froth, biting tendency and staggering gait followed by partial paralysis of lower jaw, head pressing to hard objects and absence of hydrophobia. The animal was found dead after ailing for six days. Postmortem examination revealed frothy exudate in the trachea and bronchi and severe congestion of the meningeal vessels.

Histopathologically, brain tissues showed engorgement of blood vessels, marked neuronal degeneration, satellitosis and perivascular cuffing (Fig. 1). Schleifstein's stained sections revealed Negri bodies

mostly in the Purkinje cells of cerebellum (Fig. 2).

Mice inoculated intracerebrally with brain suspension started dying from the fifth day post-inoculation showing typical paralytic symptoms. Brain impression smears stained by Seller's stain revealed presence of Negri bodies.

Epidemiological investigations pointed to the possibility of the animal having been infected through contact with a rabid dog.

Acknowledgement

Authors thank the Director Indian Veterinary Research Institute, Izatnagar; Director, Zoological Park, Lucknow; and Head, Division of Pathology for necessary facilities.

References

- Das, M. S. (1968). A note on some aspects of viral Zoonoses. National Seminar on Zoonoses in India (9-16 Oct., 1968). National Institute of Communicable Diseases, Delhi, India.

1. Veterinary Officer, Prince of Wales Zoological Gardens, Lucknow, India.
2. Scientist, S-2 (Wildlife), Division of Epidemiology, Indian Veterinary Research Institute, Izatnagar, (U. P.) India.

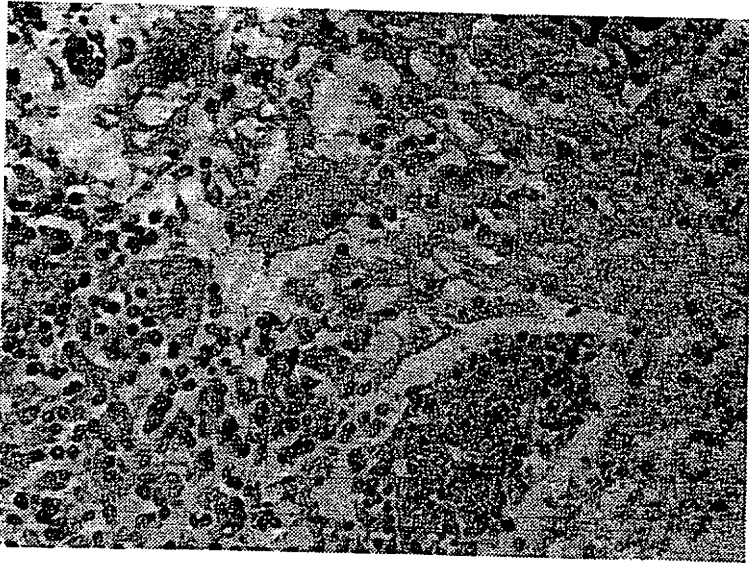


Fig. 1. Note the perivascular cuffing in brain section and Negri body in a neuron.
H & E \times 950

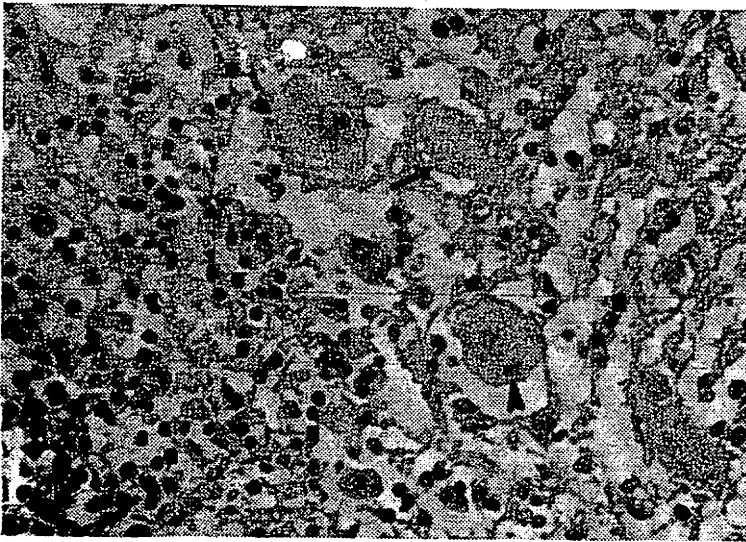


Fig. 2. Negri body (Spear) in a Purkinje cell of cerebellum and a degenerated neuron (arrow).

Schleichstein's Stain \times 950
(Page. 32)