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[w] See Images 1-7 on the web at www.zoosprint.org

RABIES IN AN INDIAN RHINOCEROS (*RHINOCEROS UNICORNIS*) IN CAPTIVITY

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Rabies is a highly fatal zoonotic viral encephalitis to which almost all warm-blooded animals including those living in wild and humans are susceptible. The disease is most commonly seen in carnivores from which it is transmitted to herbivores. Reports on occurrence of rabies in Indian Rhinoceros are very few (Das, 1968; Mukherjee *et al*., 1984; Sabharwal, 1992; Selvam *et al*., 2003). The present communication is to keep on record the clinical signs and pathology of rabies in an Indian One-horned Rhinoceros in captivity.

A female Rhino of 4 years 7 months old died in the Assam State Zoo after showing nervous disorders for about 36 hours. The clinical signs exhibited by the animal were: off-feed, excitement, repeated falling and rolling on the ground, ramming of head on the ground, staggering gait and shivering of hind quarter. There was severe congestion of eyes, epistaxis and bleeding from mouth due to injury, and prolapse of rectum. As reported, the animal preferred to drink and stay in water. On enquiry, it was revealed that a stray dog was noticed about a week ago in the neighbouring enclosure. Haematological examination *viz*. TLC, TEC, DLC and haemoglobin were found within the normal range.

Postmortem examination showed congestion of brain with clotted blood in the cranial cavity. The nasal mucosa was congested and nasal cavities were filled with clotted blood. Muscles in the head region were haemorrhagic. These changes were mostly due to injury meted to the animal during the period of excitement. Tongue and oral cavity showed hyperemia. Stomach and intestine contained half digested feed materials. Representative tissue samples including brain were collected in 10% formol-saline and processed through paraffin embedding technique and sections were stained by routine haematoxylin and eosin method for histopathological studies.

Microscopically, section of brain showed lesions of encephalitis characterized by congestion and perivascular cuffing by lymphocytes and gliosis. The purkinjee cells of cerebellum revealed single to multiple eosinophilic intracytoplasmic inclusion bodies with distinct haloes around. Almost similar clinical signs of exicitability, gross and microscopic lesions were described by Mukherjee *et al*. (1984) in case of rabies in a captive rhinoceros. The stray dog might have acted as the source of the disease, although no bite injury could be seen during postmortem examination of the animal. However, demonstration of intracytoplasmic inclusion bodies suggestive of Negri bodies confirmed the disease as rabies.

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