

GAME CASE REPORTS

WILDEGEVALVERSLAE

MYCOBACTERIOSIS IN A BLACK RHINOCEROS
(*DICEROS BICORNIS LINNAEUS 1758*)

M. E. KEEP* AND P. A. BASSON**

HISTORY

In early 1967 an old black rhinoceros female in Hluhluwe Game Reserve developed a very large swelling over the caudal part of the left mandibular ramus, which, from a distance, was tentatively diagnosed as a salivary cyst. The swelling subsequently reduced in size until only a small fibrous enlargement could be detected upon close examination. At no time did the condition appear to inconvenience or affect the animal.

During 1968 she was seen to be lame on the left hind leg and she had septic wounds in the groin and perineal region. She was immobilized, the leg was examined and the wounds were treated, and she was released into the veld. The wound healed and the lameness improved, till she walked soundly but limped when running. During this period she had several oestrous cycles; it was noticed that when a bull attempted to mount her prior to mating, her hind legs collapsed under her.

In January 1970, her calf, which still accompanied her, was darted from a moving Land Rover. When the cow was chased, her hind legs collapsed, and she was unable to rise again immediately. Some hours later it was observed that she had risen and had walked away.

MACROSCOPIC EXAMINATION

The cow died on 19th October 1970, and a post-mortem examination was commenced two hours after death. Her condition had been noticeably deteriorating for some months prior to death, by which time she was very thin indeed. She had not calved since 1966. Old healed fibrous scars were evident in the groin and perineum. The lips of her vulva were deformed by the contracting cicatrization of old wounds caused by the horns of other rhinos. There was a heavy tick infestation surrounding the mammary glands, and in both axillae. There was generalized, severe subcutaneous oedema and all mucous membranes were anaemic. Blood and

spleen smears were examined for protozoa, but none was detected. A large abscess was found in the pelvic cavity and all the lymph nodes draining the area were enlarged. There was, in addition, generalized oedema of the lymph nodes throughout the body. No abnormality was observed when the spinal cord in the lumbosacral region was exposed. The pericardium was thickened and a large amount of pericardial fluid was present. The heart appeared normal. Circumscribed areas of the stomach wall were thinner than normal; it appeared that the serosa and part of the muscular coat had become ulcerated. Apart from the oedematous mesenteric lymph nodes, the whole mesentery was oedematous and therefore greatly thickened. The liver was congested, and had extensive areas of fibrosis at its periphery. The reproductive system was inactive, the ovaries being small and fibrotic and the uterus atrophic. There were multiple abscesses throughout the lungs, varying in diameter from a few millimetres to five centimetres. When opened, some were filled with liquid pus, while others had become organized and calcified. Chronic pleural adhesions were present.

In addition to a normal heavy infestation of nematodes, cestodes and dipterous larvae in the alimentary canal, unidentified nematodes were isolated from the bronchioles.

HISTOPATHOLOGICAL EXAMINATION

Focal disseminated areas of chronic granulomatous reactions were found in the lungs, regional lymph nodes and pleura. They contained multinucleated giant cells and areas of calcification. The Ziehl-Nielsen stain revealed the presence of small numbers of an acid-fast *Mycobacterium* sp. Mucocatarrhal bronchiolitis was also present.

DISCUSSION

Only one free-ranging animal has recently been found to have died naturally from mycobacteriosis. This was an Impala from the Kruger National Park.

*Natal Parks, Game and Fish Preservation Board, P.O. Box 662, Pietermaritzburg.

**Division of Veterinary Services, P.O. Grootfontein, South West Africa.

REFERENCES

1. BASSON P. A., McCULLY R. M., KRUGER S. P., VAN NIEKERK J. W., YOUNG E., DE VOS V., KEEP M. E. & EBEDES H. 1971

Disease conditions of game in Southern Africa: recent miscellaneous findings
Vet. med. Rev. 2/3 : 313

MYCOTIC INFECTION IN BLUE WILDEBEEST (*CONNOCHAETES TAURINUS BURCHELL* 1823)

M. E. KEEP* AND P. A. BASSON**

HISTORY

During August 1970 large numbers of blue wildebeest calves in the Mkuzi Game Reserve, Northern Zululand, were seen to have skin lesions which appeared to be ring-worm. The calves, then about 9 months old, were the only age group affected. They were in poor condition owing to the inferior nutritional state of the grazing at that period. During the following summer rainy season,

when the condition of the calves had improved, no visible lesions were apparent.

In late June and early July of 1971, numbers of surplus wildebeest of all ages were captured alive in Mkuzi Game Reserve and retained in pens to await transfer to game ranches. Some of the calves in this group were in poor condition and also had irregular and circular bare areas of the skin on the face, body and legs (Fig.).

