

CASTRATION OF A BLACK RHINOCEROS *DICEROS BICORNIS MINOR*

V. DE VOS

*Department of Research and Information
National Parks Board of Trustees
Private Bag X402
Skukuza
1350*

H. H. BRAACK

*Park Warden
Addo Elephant National Park
Private Bag 6027
Port Elizabeth
6000*

Abstract – A black rhinoceros (*Diceros bicornis minor*) in the Addo Elephant National Park was castrated in order to prevent the possibility of an aotic inducing gene to be introduced into the Addo population. The classic castration technique was used. It was subsequently found that the rhino showed a drastic change in behaviour, and is at this stage predictably timid, which is not the case with his testis carrying compeers.

Case history

The unilaterally earless adult black rhinoceros bull, as depicted (Fig. 1) was caught in the Hluhluwe Nature Reserve and translocated to the Addo Elephant National Park during September 1977. Two other adult black rhino bulls with normal external ears made up the full consignment. They were introduced into Addo as breeding males in order to fill a vacancy which was left by the recent demise of the only adult bull in the Addo rhino population. Before this introduction the population consisted of 10 animals that were products of an introduction of seven black rhinos, in 1961 and 1962, from Kenya. These animals and their offspring all had normal pinnae.

Uni- or bilateral aotus in the black rhino has been recorded from at least seven discrete populations in eastern and southern Africa, *inter alia* the Hluhluwe Game Reserve (Goddard 1969, *E. Afr. wildl. J.* 7:178). It has also been suggested by Goddard (1969) that a sex linked genetic



Fig. 1. A unilateral earless black rhinoceros that was castrated to prevent the possibility of an earless inducing gene to be introduced into the Addo population.

character might be responsible for this congenital deformity. In order to lessen the risk that this genetic character be introduced into Addo, it was decided to castrate this male.

The animal, that was already released in the Addo bush, was subsequently sought out and immobilized, using a powder-charged hypodermic-projectile firing gun* and a 1 ml capacity spring-loaded projectile-syringe loaded with a newly developed piperidine derivative (R33799**) in a dosage of 2 mg as prescribed by De Vos (1978, *Vet. Rec.* 103: 64-68). The animal went down in 3½ minutes and castration procedures commenced 15 minutes later.

**Cap-Chur Gun. Palmer*

***Janssen Pharmaceutica*

In the rhino the testis is situated extra-abdominally in the usual position and it was decided to use the classic castration approach. A skin incision was made over the ventral aspect of the scrotum, through the parietal tunica vaginalis and the testis was exposed. The one testis was then lifted from the wound, the mesorchium incised and the vessels ligated before the testis was removed. The other testis was removed in the same manner through a separate incision. The wounds were packed with sulphanilamide powder and left unsutured for free drainage to take place.

Fifteen mg cyprenorphine hydrochloride (M285***) were given intravenously as an antidote to R33799. The animal got up in 4 minutes, seemed totally aware of his surroundings and moved off.

The rhino was observed on regular intervals afterwards. No apparent ill-effect from the operation could be seen.

Subsequently this rhino, however, underwent a change of temperament, which was subtle at first, but at this later stage must be considered quite drastic. He has become quite timid and predictable in his habits and reactions. Safaris of tourists can be taken out to view the animal with near predictable results. This rhino must in fact be considered the most photographed black rhino in southern Africa today.

His testis carrying compeers, on the other hand, are still quite wild and unpredictable in the best traditions of the black rhino, and are seldom seen, and then only for a fleeting second, amongst the thick bush of Addo.

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****Reckitts*