



### VOLVULUS IN A WHITE RHINOCEROS (*Ceratotherium simum*)

On the 29th October 1974 an old female white or square-lipped rhinoceros (*Ceratotherium simum*) was found dead in the Kruger National Park. She had a 7-month old calf at heel. A necropsy was performed the next day.

On opening up the abdomen signs of an acute diffuse peritonitis were visible. The blood vessels of the stomach and intestines were distended and a large quantity of foul-smelling dark-coloured fluid with pus was found in the abdominal cavity. Advanced abdominal and intestinal tympany were present. As depicted by the above figure, a portion of the small intestine was twisted around its own axis, winding the mesentery taut to form total occlusion or strangulation of the lumen and blood vessels. In the above figure the affected portion was held by an assistant. The upper arm indicates the point where twisting, occlusion and strangulation took place. A diagnosis of volvulus was made.

The rhinoceros is supposed to be a species closely allied to the horse, both being members of the Order Perissodactyla. A similar layout of the lower alimentary system further corroborates this theory. The gross anatomical features which predispose volvulus in the horse, are therefore also present in the rhinoceros and must have some significance in the aetiology of the present case.

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### VOLVULUS IN 'N WITRENOSTER (*CERATOTHERIUM SIMUM*)

Op die 29ste Oktober 1974 is 'n ou witrenoster (*Ceratotherium simum*) koei dood gevind in die Nasionale Krugerwildtuin. Geen uitwendige tekens vir die oorsaak van dood kon vasgestel word nie. 'n Sewe-maande oue kalf was by haar. 'n Nadoodse ondersoek is die volgende dag uitgevoer.

Met die opening van die buikholte is tekens van 'n akute verspreide peritonitis waargeneem. Die are van die maag en dermkanaal was duidelik geswolle en 'n groot hoeveelheid slegreukende donkergekleurde vloeistof, gemeng met etter, is in die buikholte gevind. Die maag en dermkanaal was erg opgeblaas. Soos weergegee deur bostaande figuur, het 'n gedeelte van die dunderm met meegaande mesenterium 'n slag om sy eie as gemaak, om sodoende totale afsluiting van die dermkanaal en bloedvate te bewerkstellig. In bostaande figuur hou 'n assistent die aangetaste gedeelte vas. Die boonste arm van die assistent dui die plek aan waar verdraaiing en afbinding plaasgevind het. 'n Diagnose van volvulus was gemaak.

Die renoster is veronderstel om 'n naverwante spesies aan die perd te wees. Beide is dan ook lede van die Orde Perissodactyla. 'n Eenderse uitleg van die laer spysverteringsysteem verstrek hierdie teorie verder. Die algemene anatomiese eienskappe wat die perd tot volvulus predisposeer, is dus ook teenwoordig in die renoster en behoort betekenisvol te wees in die etiologie van die betrokke geval.

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