OVERSTRAINING DISEASE (CAPTURE MYOPATHY) IN THE TSESSEBE, DAMALISCUS LUNATUS AND ORIBI OUREBIA OUREBI

by

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Abstract—Overstraining disease in tsessebe and oribi is described for the first time. Reference is made to the symptomatology, pathology and treatment of this very important syndrome in the mentioned species.

Overstraining disease, which is one of the most important diseases of newly captured wild animals and which has already been responsible for mortalities in more than twenty different species of African mammals and birds (Van Niekerk, 1963, Jarrett, Jennings, Murray and Harthoorn, 1964, Young, 1966, 1967 and 1972, Young and Bronkhorst, 1971, Basson, McCully, Kruger, Van Niekerk, Young, De Vos, Keep and Ebedes, 1971 and Basson and Hofmeyr, 1972), has very recently also been diagnosed for the first time in captured tsessebe and oribi.

Tsessebe, in prime physical condition, chased for very short distances by helicopter prior to their darting with drug mixtures containing different combinations of etorphine hydrochloride (M-99, Reckitt and Sons Ltd.) or Fentanyl (Janssen Pharmaceutica) with Azaperone (Janssen Pharmaceutica), Rompun (Bayer) and/or Phenergan (Maybaker), died from a few hours to about seven days subsequent to capture. Clinical signs included initial stiffness and lameness in some individuals, muscular tremors and in some cases, the passage of coffee-coloured urine (myoglobinuria). Post mortem examinations revealed the characteristic dull whitish necrotic muscular lesions, surrounded by extensive haemorrhages. These lesions occurred in the skeletal as well as in the cardiac musculature. General congestion and severe pulmonary oedema, due to congestive heart failure, were also invariably observed, as well as degenerative changes in the livers and kidneys.

Oribi, chased over variable distances with land vehicles and horses prior to their capture in drop nets and subsequent tranquilization with Azaperone, developed similar complications but relatively fewer animals (5.3%) became clinically affected in comparison to the captured tsessebe (64%). Tetraplegic individuals invariably also developed torticollis

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which might in part also have been due to direct trauma. Clinical and post mortem signs were otherwise the same in both species.

Prophylactic and subsequent symptomatic treatment with various medicaments, including vitamin E and selenium containing preparations and/or vitamin B12, calcium borogluconate, systemic antibiotics, detoxicants, corticoids and antihistamines proved to be of no avail in clinically affected individuals and further emphasizes the importance of the prevention of overexertion, shock and stress in susceptible species during and subsequent to capture.

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