CHEMICAL IMMOBILIZATION OF GRANT'S ZEBRA *EQUUS BURCHELLI BOEHMI* FOR EXAMINATION AND TREATMENT OF LAMENESS

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An 18-year old male Grant's Zebra *Equus burchelli boehmi* of Arignar Anna Zoological Park, Vandalur, developed lameness in the left forelimb due to overgrown hoof. The pastern region was swollen and the animal exhibited symptoms of pain during movement, and preferred to keep the affected limb off the ground. Parenteral anti-inflammatories and antibiotics were administered, but he showed little improvement. Wounds started to develop above the coronet, in the anterior and medial aspects and sero-sanguinous fluid started to ooze from the wounds. Because of the intense pain, the animal prefered to lie down and as a result, bed-sores developed over the elbow joints, shoulder and hock joints. The swelling extended further upward involving the lower third of the limb. Attempts for restraining manually proved futile and it was decided to chemically immobilize the zebra for detailed examination and treatment.

Chemical immobilization: The zebra was immobilized with Etorphine hydrochloride (2.45mg) and Acepromazine maleate (10mg) using a blowpipe. Signs of anaesthesia were observed after 45 seconds as the animal tried to regain the standing posture with all the legs spread. The relaxed penis protruded and the head was held high after two minutes of the injection. The animal became sternally recumbent by the third minute and attained lateral recumbency after four minutes of injection.

Observation and treatment: The affected limb was examined and the wounds were deep with thick pus, exposing the underlying second phalanx. The area was cleaned, the hoof was trimmed, the wounds were flushed with antiseptic solution, dry dressed and magnesium sulphate-glycerine paste applied over the swollen area and bandaged. A course of parenteral anti-inflammatory (Meloxicam @ 0.3mg/kg bodyweight i/m) and antibiotics (Amoxycillin + Cloxacillin @ 10mg/kg bodyweight i/m) were administered.

Revival from anaesthesia: Diprenorphine (3.26mg) was administered through intravenous route (45 minutes after induction). The animal attained sternal recumbency after two minutes, stood up after four minutes with relaxed penis and complete recovery was seen after 12 minutes.

Nelson (1986) reported that hoof problems are commonly encountered in wild equids in all collections. The lameness in the present case was due to uneven hooves and old age, being the predisposing factor.

The dosages of etorphine hydrochloride and acepromazine maleate used in this case are in agreement with Nelson (1986) who opined that the most satisfactory agent for immobilization of zebra is etorphine @ 2.5 to 5mg with a tranquilizer either acepromazine maleate @ 5 to 20mg or xylazine hydrocloride @ 25 to 100mg. Burroughs (1993) and Koch *et al*. (1999) suggested the use of 4-6mg etorphine and 30mg acepromazine maleate or 40 to 60mg xylazine for immobilizing stallions.

The signs of induction observed in this case are in agreement with Burroughs (1993). Nelson (1986) and Kock *et al.* (1999) suggested that the antidote diprenorphine should be given twice the etorphine, but Plotka (1987) reported the effective reversal of etorphine induced immobilization with equal diprenorphine.

In this case the use of etorphine @ 2.45mg and acepromazine @ 10mg in the zebra was found to be satisfactory for examination and treatment of lameness and hoof trimming with short induction period, analgesia and rapid and smooth recovery.

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