Amputation of Tail of a Leopard (*Panthera pardus*) in Dhaka Zoo captivity

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Amputation becomes necessary when there is no alternative way to cure the lesions by medical means. Tail amputation is indicated for some incurable lesions such as ulcer, a necrotic vertebra or malignant tumor of the tail in domestic animals (O'Conner, 1980), which can also be applied to wild animals. Thirumurugan *et al.,*(2004) described amputation of tail of palm civet. Dhaka Zoo is exhibiting three Leopards (*Panthera pardus*) at present. A case of necrotic wound in the tail of a leopard and hence its management by caudectomy under Ketamin anesthesia is reported.

Case History:
A Female Leopard kept at Dhaka Zoo got injured by fighting with an inmate, at lower third portion of tail in the month of November, 05. The animal was then brought to Zoo Veterinary hospital. The lacerated wound was then washed, cleaned, and dressed by povidone-iodine, tincture-benzoine and bivacyn spray (Neomycin+ Bacitracin). The animal was treated with cephalexin (10 mg/kg b.wt) i/m and Vit-c orally through water. The wound was healed at that time and then we shifted it to her enclosure. But after few months later (April, 06), the animal started to bite aggressively and scratch the wounded part of the tail with the protective barrier around the shed; as a result the wound was aggravated with continuous oozing. The wound extended anteriorly and day by day the condition went down to bad prognosis. As a result to prevent further aggravation as well as to facilitate healing, it was decided to do caudetomy. Day before operation the animal was kept in the small part of the enclosure for separation from her partner and for easy anesthesia and post operative care.

Anesthesia:
The animal was anesthetized by using combination of Inj. Ketamine HCL (Ketamil(R); 100mg /ml), 10 mg/kg body weight (4 ml for 40 kg bwt.) and Inj. Sedil(R) (Diazepam; 10mg/2ml ampoule), @ 0.5 mg/kg body weight (4 ml for 40 kg bwt.) respectively. For local anesthesia Inj. Jasocaine(R) 2% (Lignocaine HCL) were injected around the wound. The intramuscular ketamine injection was applied to right thigh region by using blowpipe. After 3-4 min. the animal became quite and laid down in a corner of the enclosure. The action of the anesthesia marked by twitching of ear pinnas and mild salivation, head movements and all these action became more prominent time to time. At the last stage of anesthesia the movement ceased, the blinking of eyes and swallowing reflexes were stopped. From intramuscular injection to last stage of anesthesia took only 19-20 min. After completion of anesthesia eyes of the animal covered with cloth but nose and mouth of the animals kept free for proper ventilation.

Surgical Procedure:
For caudectomy 11th, intercoccygeal space was selected by assessing the extent of injury. The area around the site of incision was shaved and prepared aseptically. A tourniquet was applied around the base of the tail. In this case, caudectomy was completed by a usual V-shaped lateral incision. The skin incision was started 4 cm caudal to the 11th intercoccygeal space from both lateral site and was continued in the subcuties anteriorly on the dorsal aspect of tail with the scalpel, up to 13th intercoccygeal space. Similar incision was given ventrally. After completed incision, lateral and ventral coccygeal vessels were ligated with chromic catgut as an additional measure to prevent haemorrhage and then cut the proximity of tail by given incision. The edge of the skin flaps were trimmed and was closed by opposing the skin flaps with silk, in a simple continuous manner. After removing the tourniquet minimal bleeding was noticed.

Post-Operative care:
The surgical wound was cleaned with hydrogen peroxide, dressed with povidone iodine, then sprayed with Bivacyn and bandaged. The Leopard was kept in a small shed for the eases of monitoring and dressing the wound. Signs of recovery from anaesthesia were noticed after 30 minutes of induction and complete recovery was noticed after 90 minutes. A course of Inj. Trizone(R) (Ceftriaxazone) 1 gm daily was given intramuscularly for a period of 5 days. The bandage was removed on the 2nd day. Gention violet was sprayed over the surgical wound. No discharge or swelling was visible. The surgical wound healed quickly and seen free from licking and biting probably due to proper medication and less because of far reach of short tail, which helped in proper healing. Complete healing of the wound was noticed after two weeks and the animal was transferred to the large enclosure.

In this case, the leopard lost a portion of her tail in the fight with inmate, which developed itching sensation, biting and licking continuously during healing process which in turn resulted in the exposure of vertebral bone. In this surgical procedure only Ketamin and Diazepum were used instead of Xylazine which is differed from the following authors but Rettig ang Divers (1986) observed no serious side effets with 11-12 mg/kg Ketamine alone. They suggested

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to add Xylazine at the dosage of 1.1 - 2.2 mg/kg body weight for muscle relaxation. Thirumurugan *et al*.,(2004) described the amputation of tail in a palm civet under Ketamine (10mg/kg bwt.) and Xylazine (2mg/kg bwt.) anesthesia. Wallach and Boever (1983) observed the chemical restraint of viverrids is similar to that of other carnivores.

With a dosage of 10 mg/kg and 0.5 mg/kg body weight of Ketamine and Diazepum respectively, the induction and recovery were smooth with satisfactory muscle relaxation.

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Ascariasis in Wild Boars – A Case Report

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Ascariasis a parasitic disease caused by a nematode parasite is responsible for considerable morbidity on domestic animals, particularly in pigs. The disease is caused by a large nematode parasite *Ascaris suum* that inhabit the small intestines of the pigs and is clinically manifested in the form of deaths and retarded growth. The parasitic eggs are sub globular and measure about 60-70 ì X 40-55 ì in size with a coarsely pitted shell having yellowish tinge. The yolk appears as un- segmented compact mass in the center of the ovum. Infection is acquired by ingesting embryonated eggs through contaminated feed and water or by licking the soiled skin of the dams in case of suckling piglets. The migrating larvae cause damage to the organs such as liver, lungs. The adult worms inhabit the small intestines where they cause mechanical obstruction to the gut apart from feeding on the nutrition of the pig. Damage occurs both due to larvae and adult worms.

In the present case ascariasis was recorded in two wild boars (*Sus srcofa*) during routine examination at Nehru Zoological Park, Hyderabad. These boars were captured in the forest areas of Karimnagar district and were trans located recently. The faecal specimens of the boars revealed large number of ascarid eggs on microscopic examination. The present observation is suggestive of the prevalence of ascariasis among wild boars too under natural habitat as it is among the domestic pigs.

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The two wild boars along with other two were put to antihelmintic treatment with piperazine adipate @ 250 mg/kg bwt. The average weight of the animals was estimated as 20 kg. The drug was administered daily in feed consisting of mash, carrots and potatoes for three consecutive days. The faecal specimens were tested 25 days post treatment and ascarid eggs could not be found in the smears. However, the course of treatment was repeated once again. The infection could be controlled through prompt treatment and frequent removal of the faecal matter from enclosures and cleaning at regular intervals.

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