

Case Report

Surgical management of subcutaneous cyst on the forelimb of a Royal Bengal Tiger

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A 5 year-old female Royal Bengal Tiger (*Panthera tigris tigris*) was reported as having a cyst-like structure on the left forelimb, confirmed by physical examination under general anaesthesia with xylazine and ketamine and fine needle aspiration. Surgical intervention was done by making a small stab incision with drainage of bloody fluid. The inner cyst wall was disrupted and packed with gauze soaked in tincture of iodine. No suture was given. Ceftriaxone (Trizon vet[®], ACME Laboratories limited, Dhaka, Bangladesh) 30mg/kg body weight was injected daily for seven days intramuscularly. Antiseptic dressing was done every alternate day for 7 days. After one week the cyst cavity and inflammation subsided and complete recovery was evident. (*Bangl. vet.* 2013. Vol. 30, No. 2, 78 – 80)

Tiger (*Panthera tigris tigris*) population is critically endangered in their historic ranges because of habitat destruction, poaching and retaliatory killing (Karanth and Gopal, 2005). Decline is associated with health-related problems and therefore health monitoring and management should be mandatory for conservation of wildlife (Shrivastav, 2001; Prater, 2005). Most commonly reported diseases of tigers are trypanosomiasis, parasitic infestations, capped elbow, lacerations, abscesses and canine distemper. There was no prior record of subcutaneous cyst in captive or wild tiger (Leipold, 1980; Woolfrey *et al.*, 1985; Montali *et al.*, 1986; Bush *et al.*, 1987).

An unusual soft fluctuating lump on the axial region of a five year-old Royal Bengal tiger, weighing 170 kg from the Safari Park, Gazipur, Bangladesh was reported to the Veterinary Teaching Hospital, Bangladesh Agricultural University, Mymensingh. There were no signs of systemic illness, pain and discomfort.

The tiger was anaesthetized with xylazine hydrochloride (Rompun[®] 2%, Bayer Animal Health) 1 mg/kg body weight and ketamine hydrochloride (G-ketamine, Gonoshasthya, Bangladesh) 7 mg/kg body weight intramuscularly using blow pipe. A large (8.5 × 6 × 6 inches), soft, fluctuating lump was detected behind the brachium, distally near the elbow joint of the left foreleg.

On palpation, a subcutaneous flabby soft cyst (Fig. 1a) was confirmed with no signs of inflammation. The cyst was explored using an 18G one inch sterilized needle, and five

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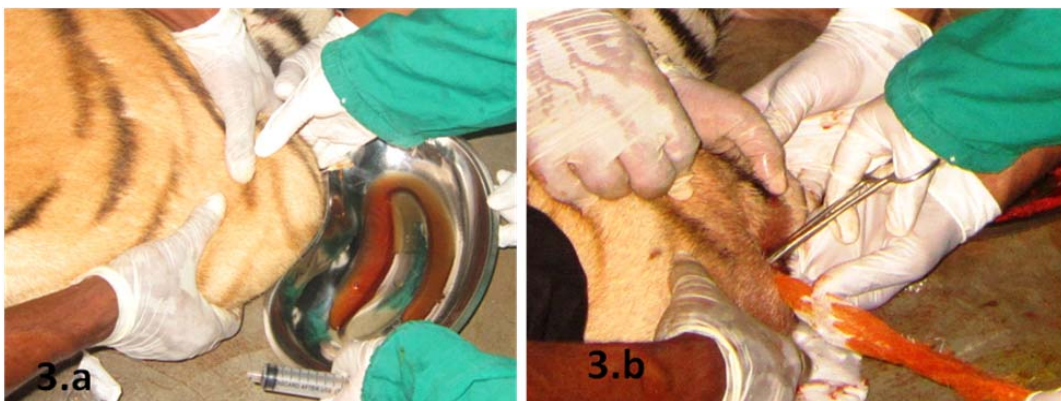
mL of clear blood-tinged fluid was withdrawn. The fluid was examined for consistency, transparency, colour, and odour. No pus was detected. The mass was diagnosed as subcutaneous cyst (Fig. 1b, 1c).



Figs. 1(a) close inspection, (b) observation and (c) examination of cyst fluid

The tiger was vaccinated with purified tetanus toxoid (Tetavex®, 0.5 mL ampoule, Sanofi-aventis Bangladesh Limited, Dhaka) 0.5 mL subcutaneously one week before operation. A 1.5 × 1.5 inches area was shaved and painted with tincture of iodine. A stab incision was made and cystic fluid was drained out. Sterile gauze soaked with tincture of iodine was used with curved forceps to disrupt the cyst wall. About 400 mL blood-tinged fluid was withdrawn and gauze was used to pack the cavity (Fig 2a, 2b). No suture was given.

After 15 minutes of the surgical procedure, the tiger regained conscious. Ceftriaxone (Trizon vet®, 2 gm vial, ACME Laboratories limited, Dhaka, Bangladesh) 30 mg/kg body weight was injected daily for seven days intramuscularly and fly repellent (oil of turpentine) was advised around the incision site.



Figs. 2(a) draining fluid and 2 (b) dressing the cavity

After recovery the tiger showed moderate aggressiveness and nervousness. No other physiological abnormalities were reported. There were minimum exudates, and no signs of systemic illness. The volume of cyst cavity was reduced to one third. The cyst cavity was dressed every alternate day using tincture of iodine. After 14 days there was complete healing.

Most common causes of subcutaneous cyst include trauma and infection, excessive testosterone level and other hormonal imbalance (Zuber, 2002).

This case study might suggest an effective way of handling similar cases in future.

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