

treated with broad-spectrum antibiotics, analgesics and tetanus toxoid injection intramuscularly and metrinidazole and furzalidone combination as intra uterine therapy.

The antibiotics and analgesics treatment was continued for three days in the feed and the animal was kept under observation. There was regular progress in her feed consumption and finally the animal recovered completely. Roberts (2002) reported that incidence of dystocia in posterior presentation of foetus in unipara is high. The findings of Adams and Bishop (1963) who opined that 85% of all the dystocias were in heifers. In the present case dystocia (posterior presentation) coincides with the above author reports, since the animal is unipara and also it was in first parturition.

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VET BRIEF

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Anaesthetic and surgical management of epulis in a Black Bear *Selenarctos thibetanus*- A case report

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Tumours connected with jaw are termed epulis. Such tumours have been reported in cattle, buffaloes and camels (Tyagi & Singh, 1993; Parikh *et al.*, 1997) but rarely in wild mammals (Bell, 1968).

This Brief deals with anaesthetic and surgical management of epulis in a female domesticated Black Bear (*Selenarctos thibetanus*) of approximately 3 years of age weighing about 160kg. There were two tumourous growth of varying size at the level of both the upper canines. The growth on the right was bigger than that on the left side. The tumours were slow in occurrence since last six months. Radiograph of snouts in dorso-ventral projections demonstrated bony growth of varying size originating from both lower canines and involving entire cranial aspect of mandible (Image 1^w).

The animal was prepared for general anaesthesia by keeping off feed and off water for twenty four and twelve hours respectively. The bear was premedicated with atropine sulphate @ 0.01mg/kg bw. After 30 minutes of premedication a combination of xylazine @ 2mg and ketamine @ 8mg/kg bw was injected i/m in the thigh muscles by controlling the animal manually. Sedation was observed within 15min and the animal went into lateral recumbency. After 25min post xylazine-ketamine administration, 45ml of 5% thiopentone sodium was injected in recurrent tarsal vein to induce general anaesthesia. The level of anaesthesia was maintained by giving a booster dose of 30ml of 2.5% thiopentone sodium solution after 60min after first thiopentone sodium injection.

^w See Image 1^w in the web supplement at www.zoosprint.org

During sedation, the animal showed few bouts of vomiting reflexes without any vomitus, along with salivation and irregular respiration. However, these symptoms disappeared after induction of general anaesthesia and the animal stabilized with regular pattern of respiration and heart beats, though pharyngeal reflexes remained active during entire 120min period of operative procedure. Tumours along with the affected bony tissue was resected by gingivectomy. The removed mass of right and left side growth was 200 and 75g in weight, respectively. Haemostasis was carried out by electrothermocautery. Gum wound edges were closed with linen suture by putting simple interrupted mattress sutures. The bear did not show any symptom of pain during surgical intervention and completely recovered from anaesthesia after four hours of its induction. Postoperative care included daily intramuscular injections of streptopenicillin @ 10mg/kg bw for five days. Daily mouth wash with povidone-iodine solution followed by smearing of operated site with povidone-iodine ointment was carried out thrice a day preferably after every feed for a week. Sutures were removed on the 12th post-operative day. On the 20th post-operative day 1ml of vincristine was injected intravenously. Uneventful recovery was observed without any complication.

In the present case deep sedation was observed following intramuscular administration of xylazine and ketamine combination which facilitated restraint of animal for intravenous injection and aseptic preparation of site, but it did not produce satisfactory level of surgical anaesthesia required for drastic surgery of mouth cavity for tumour removal. Addison & Kolenosky (1979) and Singh *et al.* (1997) have also recommended xylazine-ketamine combination for chemical immobilization of wild carnivores. In the present case use of thiopentone sodium following xylazine-ketamine, produced satisfactory level of surgical anaesthesia for removal of tumourous growth without intubation of trachea as the laryngeal reflexes were present throughout the period of surgical intervention.

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VET BRIEF

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Rehabilitation of an injured Indian Cobra *Naja naja*

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The Indian Cobra *Naja naja* is one of the most persecuted snakes due to its notoreity as a poisonous snake and people's panic. An injured cobra was presented to the surgery department, Orissa Veterinary College for treatment by volunteers of the "Snake Help Line", an NGO looking after the wellbeing of snakes. The cobra measuring about 1.5m was immobile and remained with its hood