

*Short Communication*

**REMOVAL OF FACIAL MELANOSARCOMA  
OF A WHITE TIGRESS (*PANTHERA TIGRIS*)  
- A CASE REPORT**

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**ABSTRACT:** An 18 years old white tigress “Kunti” developed a large ulcerated mass originating beneath the left lower eyelid along with clinical signs of lacrimation, irritation and thwarted vision. Surgical excision was performed under tranquilization to restore normalcy. Histopathological examination revealed presence of spindle shaped anaplastic cells containing abundant melanin pigments; which was suggestive of melanosarcoma. Obligation of proper surgical techniques and maintenance of adequate postoperative measures rewarded with uneventful recovery.

**Key words:** White tigress, Lower eyelid, Facial, Melanosarcoma.

Eyelid masses may be inflammatory or neoplastic; visualized or palpated on or, around the skin of the eyelid. Although occurrence of such neoplastic masses are less common (10% to 25%) in canines; most are benign (sebaceous adenomas, benign melanomas, histiocytomas, papillomas, hemangiosarcoma, and fibrosarcoma) (Caplan and Yu-Speight 2013). Similar to canines, eyelid tumors are rare in felines; most of those identified (60%) are squamous cell carcinomas. Other eyelid tumors in felines include fibrosarcoma, adenocarcinoma, basal cell carcinoma,

melanoma, and hemangiosarcoma (Vail and Withrow 2013). Eyelid masses are slow growing and may cause discomfort by interfering with eyelid function leading to ocular irritation, periocular excoriations, keratitis, blepharospasm or pruritus (Bose *et al.* 2002; Caplan and Yu-Speight 2013). Present communication deals with surgical resection of a large periocular mass below the lower eyelid in a captive wild tigress.

**Case history**

A white tigress “Kunti” aged 18 years

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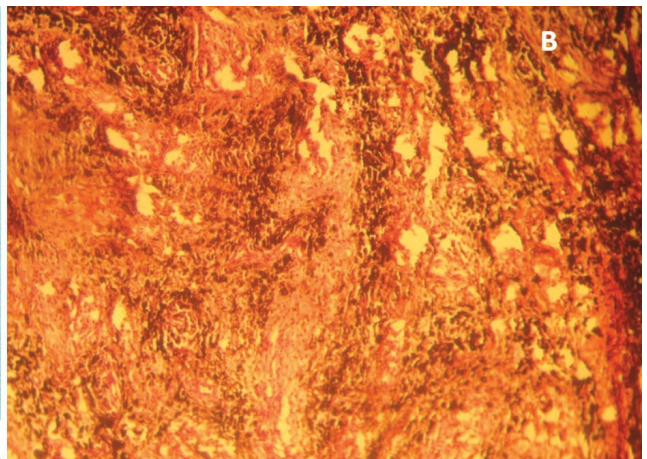
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**Fig. 1.** Showing large dark brownish growth gradually grew circumferentially covering the eye entirely and completely obstructing vision.



**Fig. 2.** Showing apposed skin after excision of the mass.



**Fig. 3.** (A) Showing excised mass. (B) Histopathological photomicrograph revealed presence of spindle shaped anaplastic cells containing abundant melanin pigments (H & E, X40).

weighing about 160 kg developed a large mass originating beneath the left lower eyelid along with clinical signs of lachrimation and irritation. The dark brownish growth gradually grew circumferentially covering the eye entirely and completely obstructing vision (Fig. 1). The mass was ulcerated and hemorrhagic due to constant rubbing on the rough surfaces. The animal was unable to open its eye and went off-feed

intermittently for six days. Local dressing and systemic administration of antibiotics was not possible due to non-cooperation of the tigress. It was decided to anaesthetize the animal for radical excision.

#### **Surgical treatment and observations**

The tigress was kept fasting for 24 hours and was brought to a squeeze cage attached to its

pen with beef bait. It was anaesthetized with a mixture of 0.6mg of atropine sulphate, 200mg of xylazine hydrochloride (Xylazil®; Troy Laboratories Pvt. Ltd.) and 400mg of ketamine hydrochloride (Ketamil®; Troy Laboratories Pvt. Ltd.) darted intramuscularly using a blow pipe. The animal was recumbent within 10 minutes and it was brought to zoo operation theatre under blind fold in a transportation crate by lifting it physically with a foldable stretcher. Dextrose and normal saline (DNS 5%) were administered by intravenous slow drip through recurrent tarsal vein. Temperature, heart rate, respiration rate and oxygen saturation were monitored every five minutes intervals till the end of the surgery. Mass was excised meticulously by giving blunt dissection without any iatrogenic trauma to orbit. Minor bleeding was arrested by application of cotton tipped adrenaline applicators and ligature. After excision of periocular mass, eye was visible (Fig. 2). Subcutaneous tissue was sutured with #2-0 absorbable polyglactin 910 (Vicryl®, Ethicon)

The excised mass was dark brownish in colour. Representative sample tissues were fixed in 10% neutral buffered formalin sent for histopathological examination. Presence of spindle shaped anaplastic cells containing abundant melanin pigments were noted. Hence it was suggestive of melanoma (Vegad and Swamy 2010). (Fig. 3).

Melanogenic neoplasms, involving the cutaneous tissues and skin of the eyelids are common occurrence in canines and felines (Caplan and Yu-Speight 2013). Melanomas originate from melanocytes and melanoblasts,

cells of neuroectodermal origin (Caplan and Yu-Speight 2013; Vail and Withrow 2013). Masses may be brown to black or occasionally nonpigmented (Vail and Withrow 2013; Vegad and Swamy 2010). Captive wild felids, over 15 years of age, usually suffer from various tumours; both benign and malignant and succumb to death in due course of time, if left untreated (Bose *et al.* 2002). Since the present case, though the tigress was very old and it was unable to see, showing symptoms of unthriftiness. Surgical excision was planned for better visibility, providing alleviation of pain, reducing bleeding, increasing appetite and extending the life span.

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