

Bilateral Squamous cell carcinoma of Nasal passage in a Non-descript Bullock

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Introduction

Various neoplastic and non-neoplastic space occupying lesions could obstruct the nasal passage leading to the respiratory discomfort to the animals (Tiwari *et al.*, 2010). The incidence of non-neoplastic growth like polyps and parasitic nasal granuloma is comparatively high in comparison to adenocarcinoma, squamous cell carcinoma and papilloma (Tyagi and Singh, 1993). The present communication place on record a rare and emergency case of bilateral squamous cell carcinoma involving the nasal passage in a non-descript bullock and its successful surgical management.

Case History and Clinical Observations

An eight year old non-descript bullock was brought to the department of Veterinary Surgery and Radiology, College of Veterinary Science and A. H., Anjora, Durg, (C.G.) with a history of respiratory distress and snoring sound for the last 2 months. Further anamnesis revealed that there was a table tennis ball sized mass at around the nostrils which was first noticed about 3 months ago (Fig.1). Negligence by the owner worsened the condition of the animal and increased the distress with loud snoring sounds audible from a distance. Moreover, the stamina and vigour of the animal was reduced.

The animal appeared dull and depressed. There was oozing of blood tinged mucus from nostrils and the animal evinced inspiratory dyspnoea and mildly elevated rectal temperature.

Exploratory curettage of the mass along with nasal swab of the mucus was taken to rule out the possibility of parasitic infection. Based on history, clinical observations and laboratory finding, the growth was tentatively diagnosed as nasal tumour and it was decided to perform radical surgery to relieve the patient from respiratory distress.

Treatment and Discussion

The exploratory curettage of the nasal mass could not reveal parasite or fungal infection. The animal was sedated with xylazine @ 0.05mg/kg b wt. (Xylaxin[®], Indian Immunologicals, India) IM and its head was secured in position following manual restraint of the animal in lateral recumbency. The site was prepared for surgical procedure taking all the aseptic precautions. Local infiltration of 2% Lignocaine HCl (Wocaine[®] 2%, Wockhardt, India) around the growth on either side of nasal passage was done to achieve the local anaesthesia. An elliptical incision was given all around the base of the growth. Subcutaneous tissues were bluntly dissected for separation of tumour mass. The growth was removed along with a portion of healthy tissues. Haemorrhage was controlled in routine manner. The growth from the other side was also removed by using similar surgical procedures.

Post-operatively, intramuscular injection of streptopenicillin (Dicrysticin-S[™], Zydus AHL, India) for 5 days, inj. Melonex[™] (Intas Pharma.,



Figure-1. Table tennis ball sized mass at around the nostrils

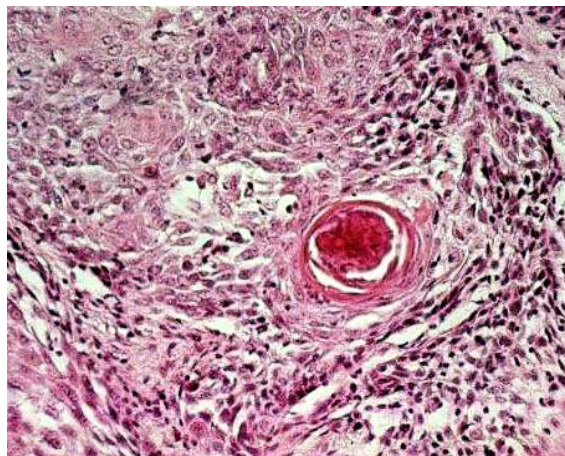


Figure-2. Presence of epithelial pearls along with multiple mitotic figures

India) 15ml for 3 days and inj. Belamyl® (ZyduS AHL, India) 10ml for 3 days were given. Daily dressing of the surgical wound was done with silver sulphadiazine ointment. The animal recovered uneventfully within a period of 9 days. There was no recurrence of the growth in a follow-up period of 6 months.

Grossly, the tumour was pink, friable with slightly raised luminal surface and had the dimensions of 2.6×3.8 cm. The representative tissue samples were collected after washing thoroughly in normal saline solution and preserved in 10% neutral buffered formalin for histopathological examination as per the standard procedures outlined by Luna (1968). The tissue was processed by the routine technique and 4-5µ thick tissue sections were stained by H & E staining method. Histopathological examination revealed presence of epithelial pearls (Fig.2) along with multiple mitotic figures confirming the mass as squamous cell carcinoma. Similar findings have also been reported by Ghosh *et al.* (2002) at the neck region of a bullock and by Satpute *et al.* (2002) at tail in a bull.

In the present case, the absence of recurrence during the follow-up period of six months was in agreement with Tiwari *et al.* (2010) who reported that although the nasal tumours are biologically very invasive locally, the distant metastasis is infrequently reported. Looking to the conditions of the poor economic

condition of the owner and severity of the case radical surgery of the tumour was attempted but chemotherapy could not be undertaken.

Therefore, it is concluded that judicious surgical excision alone of the squamous cell carcinoma in a bullock could be useful for the treatment of tumours affecting the nasal passage.

Summary

In the present case study, successful surgical management of the bilateral squamous cell carcinoma involving the nasal passage in a non-descript bullock has been reported.

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