ISSN : 2321-9602
VOLUME 4, ISSUE 4, DECEMBER 2016

Indo-American Journal of Agricultural and Veterinary Sciences

www.iajavs.com
editoriajavs@gmail.com or editor@iajavs.com

Indo-Am. J. Agric. & Vet. Sci., 2016

Indo-American Journal of Agricultural and Veterinary Sciences

ISSN 2321–9602 www.iajavs.com
Vol. 4, No. 4, December 2016
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Research Paper

SURGICAL MANAGEMENT OF EPULIS IN A MONGREL DOG

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A mongrel male dog aged 8 years was presented with a history of unusual growth since 3 months in the oral cavity. Under general anaesthesia, the mass was excised. Based on location as well as gross and microscopic features, the case was diagnosed as fibromatous epulis. The dog recovered after 10 days and showed normal appetite.

Keywords: Dog, Epulis, Surgical management

INTRODUCTION

A tumor is an abnormal growth or enlargement. There are many kinds of tumors that can occur in a dog's mouth which can be either benign (non cancerous) or malignant (cancerous). The most common sites for oral tumors are the gingiva, although the buccal or labial mucosa, hard or soft palate, and tongue are also affected. Among the malignant tumors, melanomas are the most common oral tumor in dogs, representing approximately one-third of the oral neoplasms whereas, epulis is the most common type of benign or non cancerous oral tumor (Todoroff and Brodey, 1979). Generally epulis is slowly growing, solid and firmly attached mass over the gums but sometimes pedunculated masses may also be observed (Oakes *et al.*, 1993; and Withrow, 1996). Typically, these tumors present as firm, irregular growths along the gum line in association with the teeth. The present paper reports a case of epulis and its successful surgical management.

CASE HISTORY AND CLINICAL FINDINGS

A mongrel male dog aged 8 years was presented with a history of unusual growth since 3 months on its upper jaw (Figure 1). The animal showing symptoms of difficulty in mastication, bleeding from the offending mass after taking food and the mass was gradually increasing day by day leading to further aggravation of the condition and also gradually reduction in appetite. The case was tentatively diagnosed as a case of epulis and surgical management was planned accordingly to remove the growth under general anaesthesia.

TREATMENT AND DISCUSSION

The dog was prepared for aseptic surgery and premedicated with Atropine sulphate @0.045 mg/kg body weight subcutaneously, followed by xylazine hydrochloride @ 1 mg/kg body weight intramuscular and general anaesthesia was

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Figure 1: Growth on Upper Jaw

Figure 2: Growth After Excision

induced with propofol @ 5 mg/kg body weight intravenously. The animal was positioned in left lateral recumbency with affected gum facing upward with mouth kept open with help of a mouth gag. The oral cavity was flushed with normal saline to clear off accumulated food particles, foreign materials and bloody discharge from the mass. An elliptical incision was made over the tumour involving the gum. Mass was gently separated by blunt dissection (Figure 2), and the bleeding points were identified and ligated with chromic catgut No. 1 (Figure 3). Oozing type of bleeding points were effectively managed by electrocautery. Postoperatively, ceftriaxone @20 mg/kg body weight for 7 days and analgesic meloxicam @ 0.2 mg/kg body weight for 3 days were advised. The patient was

Figure 3: Bleeding Points were Ligated with Chromic Catgut No. 1

advised for liquid diet for 3 days followed by feeding of blend diet for another 5 days. The dog recovered uneventfully and regained its normal appetite. There was no reoccurrence of growth for a study period of four months.

Oral cavity in dogs has been reported to be affected by various proliferative lesions ranging from epulides, squamous cell carcinoma, malignant melanoma and fibrosarcoma (Baker *et al.*, 1993). However, epulis is one of the most frequently reported proliferative lesions which is a benign gingival exophytic proliferation derived from periodontal ligament or connective tissue (Jones *et al.*, 1997; and Brown *et al.*, 2007). Epulis has been further classified as fibromatous, ossifying and acanthomatous on the basis of histological appearance (Yoshida *et al.*, 1999). Fibromatous and ossifying epulides can be treated with conservative surgical excision, whereas acanthomatous epulides require aggressive wide marginal surgical excision such as mandibulectomy or maxillectomy (Withrow, 1996). However, in present case, conservative surgical correction led to complete recovery thereby giving an indication that it may be fibromatous epulides. The usual sites of epulis were around the carnasal teeth and less common in the incisor region. In this case it was near the lower right 4th incisor tooth covering canine tooth and 1st

premolar tooth. In case of any recurrence of epulides, electrocautery or cryosurgery can be used to sterilize the bed of the tumor from any neoplastic cells (White, 1991). However in the present study no recurrence had occurred and the animal recovered uneventfully.

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Indo American Journal of Agricultural and Veterinary Sciences

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ISSN 2321-9602