

SURGICAL MANAGEMENT OF RANULA IN A GERMAN SHEPHERD DOG – A CASE REPORT

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ABSTRACT

Ranula rarely resolve without surgery and marsupialisation is easily applicable technique to manage sublingual salivary mucocele. A two year old male German shepherd dog was presented to Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of swelling on ventral aspect of the tongue for the past one and half month. The fine needle aspiration cytology revealed macrophages mixed with coccobacillary clumps, haemato-biochemical parameters were within the physiological range. Based on the clinical signs, the case was diagnosed as ranula. Under atropine sulphate and xylazine hydrochloride premedication, induction of anaesthesia with ketamine and diazepam followed by isoflurane maintenance, marsupialization was done. Postoperatively, the animal was treated with broad spectrum antibiotic and antiinflammatory drugs for five days, and the animal recovered uneventfully after 15 days.

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INTRODUCTION

Salivary mucocele or ranula is the most common clinical pathology of salivary gland affecting middle aged (2- 4 yrs) dogs characterized by dilatation of salivary duct

and accumulation of saliva or distention of gland at the base of the lingual region. Salivary mucocele is the collection of mucoid saliva that has leaked from a damaged salivary gland. The breeds that are commonly predisposed to this condition are Toy breeds, Miniature poodles and German shepherd (Slatter, 2003). Diagnosis of salivary mucocele involves clinical examination and fine needle aspiration cytology. Complete extirpation of salivary gland or resection followed by redirection of

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salivary gland preserves the gland architecture as a part of conservative procedure called marsupialization (Slatter, 1985).

The patient with sublingual mucocele may have abnormal prehension and oral bleeding, which is caused by trauma during chewing. Congenital cysts have the epithelial lining whereas mucocèles are lined by granulation tissue (Fossum, 2013). The present report describes successful diagnosis and treatment of ranula in a German shepherd dog .

CASE HISTORY

A two year old male German shepherd dog was presented to the Veterinary Clinical Complex, VC&RI, Namakkal with the history of swelling on ventral aspect of the tongue for the past one and half month (Fig.1) . Recurrence was noticed, even after several attempts were made by field veterinarian to reduce the swelling by aspirating the content with the help of needle and treated with antibiotic and analgesic.

DIAGNOSIS

Fine needle aspiration cytology revealed the presence of macrophages mixed with coccobacillary clumps. Haemato-biochemical parameters were Hb-13.8 g/dl, PCV- 43.8 %, RBC- $6 \times 10^6 / \mu\text{l}$, WBC-9.3 / μl , Neutrophils- 57/ μl , Lymphocytes- 37/ μl , Monocytes- 6/ μl , Platelet count- 370/ μl , BUN- 22 mg/dl and creatinine- 1.2 mg/dl. Based on the history, clinical signs and



Fig.1. General anaesthesia animal-and positioning for resection

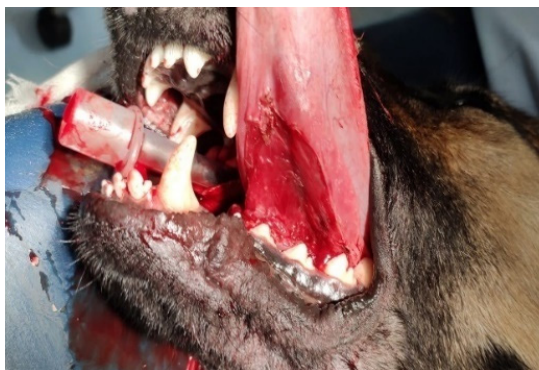


Fig.2. After resection of ranula

location of the swelling, the present case was diagnosed as ranula.

TREATMENT AND DISCUSSION

Marsupialization was done under atropine sulphate (0.04 mg/kg body wt) and xylazine hydrochloride (1mg/kg body wt) premedication. Anaesthesia was induced with ketamine (5 mg/kg body wt) and diazepam (0.25 mg/kg body wt) administered intravenously, and maintained with 2 % isoflurane. By making a small incision on the lateral aspect of the swelling, stingy mucous

was aspirated and the mucocele was excised completely (Fig. 2). Postoperatively the animal was treated with Cefpodoxime (200 mg tablet BID) for 5 days and Tramadol (50 mg tablet SID) for 3 days. The animal recovered uneventfully without any recurrence for five months.

Though salivary gland disorders are rare in canines, mucocele is considered as most common condition. The reported incidence of salivary mucocele in dog is less than 0.5 %. Mucoceles are classified based on the location as cervical, sub lingual or honey cyst, pharyngeal and zygomatic mucoceles. Clinical signs such as non-painful swelling, dysphagia, anorexia, inspiratory stertor and dyspnoea are common in patients with pharyngeal mucocele. Sialography and CT can be used to confirm the diagnosis. (Krishnaveni, 2021). The surgical treatment of salivary mucocele involves excision of damaged salivary gland (Shivaraju *et al.*, 2018).

CONCLUSION

The ventral swelling of tongue in a two-year-old German shepherd dog was diagnosed as salivary mucocele, and successfully treated by surgical resection

under general anaesthesia with no recurrence for five months.

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