

MANAGEMENT OF ORAL EPULIDES IN DOGS – REVIEW OF FIVE CASES

Shongsir Warson Monsang¹, Sabyasachi Bhattacharya², V. Lalzawmliana², Justin B. William³

¹Associate Professor, ²Assistant Professor, ³Professor & Head, Department of Surgery & Radiology, College of Veterinary Sciences & A. H., R. K. Nagar, Tripura, India.

[Received: 04.10.2018; Accepted: 09.4.2019]

{DOI 10.29005/IJCP.2019.11.1.073-075}

Five cases of dogs presented with clinical signs of pinkish masses of various sized sprouted from the gum like a peduncle between the upper and lower first and second maxillary premolars was diagnosed histologically as acanthomatous epulis and treated for the same with combined surgical excision of the masses along with chemotherapy. The animals showed uneventful recovery after treatment without any recurrence.

Keywords: Chemotherapy, Dogs, Epulides, Histology.

Oral tumors represent approximately 5-10% of all tumors in dogs and cats (Stebbins *et al.*, 1989; Oakes *et al.*, 1993). In dogs, a large proportion of proliferations are reactive or benign (Harvey and Emily, 1993), while in cats the majority of proliferations are malignant (Oakes *et al.*, 1993). Amongst all types of oral tumors, epulides constitute a group of benign neoplasms containing periodontal stromal ligament, and represents around 30% of all oral neoplasms. Categorically, epulides are divided into three types based upon the histologic type, clinical appearance and tumor behaviour as fibromatous (fibrous), ossifying, and acanthomatous (Baba and Catoi, 2007) and all these tumors arise from residual developmental cells residing in the periodontal ligament. The tumors are mostly found in region of mandibular incisor to premolar region (Gardner, 1996) and seen in any breeds of dogs of any age more commonly in older dogs and brachycephalic breeds of dogs. This study presents reports of successful management of acanthomatous epulids located in the maxillary premolars with surgical excision along with chemotherapy.

Case History and Observations

A case of tumor-like growth in the oral cavity was recorded in five dogs (two male Pomeranian and three male Spitz) aged between 2 - 3.5 years for optimal evaluation and treatment. All the dogs had suffered for

almost half to one month and treated elsewhere with some antibiotic and homeopathic medicines with little or no improvement. All the physiological parameters were within the normal limits and the observed clinical signs varied from salivation, halitosis, inappetence and slight difficulty in eating. The masses were firm and rounded, small to medium sized, reddish to pinkish, solitary and irregular surface which seemed to be sprouted from the gum like a peduncle and in two of the cases located between the upper and lower 1st and 2nd maxillary premolars on the right lateral side of the cheek [(Fig.1 (a) & Fig.1 (b)]. Surgical excision of the masses along with chemotherapy were resorted to manage the conditions.

Treatment and Discussion

Prior to surgery, all the dogs were kept under the umbrella of prophylactic antimicrobials for 3 days. After proper fasting and withdrawal of water, all the dogs were anesthetized with the same anesthetic protocol consisting of atropine sulphate @ 0.02mg/kg, I/M as preanesthetic; xylazine – ketamine @ 0.5mg/kg & 7mg/kg combination injected intramuscularly for induction; and maintenance by diazepam – ketamine combination (1:1 ratio) given intermittently by intravenous route throughout the surgical procedure. After restraining dogs in recumbent position, the mouth of the dogs were kept open by using a disposable needle cap placed on canine tooth of both upper and



Fig.1 (a): Acanthomatous epulis on right upper maxillary region



Fig.1 (b): Acanthomatous epulis on right lower oral cavity

lower jaw for proper exposure of the masses. After setting the thermocautery unit, the mass of the growth was excised from the base with the help of cutting probe and hemorrhage was controlled with the coagulation probe to stop the bleeding (Fig.2). The excised masses were preserved in 10% formalin for further processing and histopathology to identify the type of epulides. Adequate care was taken such that all the tissues were removed to avoid any chance of recurrence in the later stage. Thereafter, the mouth was cleansed thoroughly with the help of cotton soaked in chlorhexidine mouthwash and the site of surgery was painted with povidone-iodine solution. Post-operatively, a course of antibiotic Ceftriaxone @ 25 mg/kg, I/M and anti-inflammatory drug Meloxicam @

0.2mg.kg, I/M were administered for five days. Chemotherapy was done by Vincristine sulphate @ 0.025mg/kg, I/V giving intravenously at weekly interval for two times. The dogs were allowed to feed only soft liquid diets and avoid meat and other hot liquid diets for the first two weeks of post surgery. Post-operatively, all the dogs made an uneventful recovery and no complications and recurrence were observed.

Histological studies showed acanthomatous type of epulis (Fig.3) which differentiate it from other epulides and helped to decide subsequent treatment protocol to affect a cure. In our case, we attempted a combination of complete surgical excision and chemotherapy with good results without any recurrence.



Fig.2: Surgical excision of the epulids



Fig.3: Histopathology section of acanthomatous epulis

Conclusions

Indian Journal of Canine Practice
ISSN: 2277-6729 e-ISSN: 2349-4174

In this study, successful treatments of oral epulides with a combination of surgical excision and chemotherapy are reported.

References

- Baba, A.I. and Catoi, C. (2007). Comparative Oncology, 2nd edn., The Publishing House of the Romanian Academy, Bucharest, Romania. Pp. 316-318.
- Gardner, D. G. (1996). Epulides in the dog: A review. *J. Oral Path. & Med.*, **25**: 32-37.
- Harvey, C.E. and Emily, P.E. (1993). Oral Neoplasms. In: Small Animal Dentistry, 1st edn., Mosby, St. Louis, Missouri, U.S.A. Pp. 297-311.
- Oakes, M.G., Lewis, D.D., Hedlund, C.S. and Hosgood, G. (1993). Canine oral neoplasia. *Comp. Cont. Ed. Pract. Vet.*, **15**: 15-29.
- Stebbins, K.E., Morse, C.C. and Goldschmidt, M.H. (1989). Feline Oral Neoplasia: A Ten-Year Survey. *Vet. Pathol.*, **26**: 121-128.