Short Communication

EPULIS AND ITS SURGICAL TREATMENT
IN A SPITZ BITCH

A.K. Maji*, D. Basak¹, P. Das², J. Mukherjee¹

ABSTRACT: One Spitz bitch of about 7 years of age with pedunculated soft tissue mass at upper left corner molar teeth was presented. Local excision under Atropine - Xylazine - Ketamine - Diazepam combined administration was performed with red hot iron thermo-cauterization. The excised mass on histopathology showed squamous hyperplasia with fibrous network and angiogenesis interpreting fibrous epulis. No recurrence was observed or no chemotherapy was needed up to one year post-operation.

Key Words: Fibrous Epulis, Upper jaw, Complete removal.

Oral tumor is of two types - benign or locally invasive benign and malignant with or without metastasis. Tumor in odontogenic origin is the most common benign tumor of canine oral cavity (Spodnick and Page 1995). Epulis is non-specific term which refers to tumors and tumor-like irregular gingival masses observed on either side of the dental arcade (Head et al., 2002). This communication puts on records of the occurrences of epulis from left upper rear molar tooth in a dog.

Case History

One 7 year aged never bred intact Spitz female dog was presented to the University Clinics, Belgachia, Kolkata with the signs of difficulty of chewing, prehension and huge salivation. On physical examination, a pedunculated soft mass of about 3 cm X 3 cm size was found attached with left upper corner molar tooth (Fig.1 and Fig.2). As per reporting, the growth developed in 3 months and had a tendency of bleeding on provocation. There was no familial history of oral tumor. Local lymph nodes were not palpable. On radiography, no bone involvement or osteolysis was observed.

Surgical treatment and observations

Local excision along with adjacent soft tissue removal was performed under Atropine sulphate @ 0.04 mg/kg b.wt, xylazine @ 1.5 mg/kg b.wt. and Ketamine @ 3 mg/kg b.wt. intramuscular injection at a gap of 5 and 10 minutes respectively following dorsal recumbency. Maintenance was done by 1:1 mixture of “to effect” diazepam and Ketamine intravenously. Red hot iron was applied as thermocautery to check the bleeding (Fig.3). The excised tissue
Fig. 1. Epulis attached with left upper rear molar at gingival border.

Fig. 2. Bleeding from gingival border.

Fig. 3. Tumour excised and cautourized.

Fig. 4. Squamous cell proliferation. H & E. 20X, 100 µm magnification.

Fig. 5. Fibrous Proliferation. H & E Stain, 20X, 100 µm magnification.

Fig. 6. Vascularisation seen. H & E Stain, 20X, 100 µm magnification.
was sent for histopathological examination. Betadine mouth wash (Win-Medicare, New Delhi) and systemic antibiotic (Inj. Cefotaxime, Alkem) for 5 days resulted uneventful recovery.

On histopathology, the superficial layer revealed epithelial hyperplasia with a huge distribution of squamous epithelium interwoven by fibrous matrix. The pleomorphic epithelium showed large oval nucleus in cytoplasm (Fig.4). The deeper layer of the epulis showed a proliferative network of fibrous tissue with inconspicuous elongated and fusiform nucleus (Fig.5). There was limphoplasmatic infiltration with huge proliferative angiogenesis. Red blood cells were clustered inside the proliferated blood vessels. These findings suggest a localized inflammatory hyperplasia of fibrous epulis.

Out of two types of oral tumor, benign type of non-recurrence or recurrence were reported by Philipsen and Reichert (2000), Maji and Ghosh (2007) in Haryana cow. Successive reports of similar observation were documented by Raghuvanshi et al. (2012), Arulmozhi et al. (2012), Maji et al. (2014), Sharma and Kushwaha (2015) and Maji (2015). In this case salivation was more as the growth was nearer to the opening of the corresponding Stenson’s duct as well as its stimulatory effect on parotid gland. This report followed the recommendation of White and Gorman (1989) for local excision and thermo-cautorization. There was no recurrence and the animal is quite normal after one year of the operation.

REFERENCES


