SALIVARY GLAND DISEASE:

True or False - An effective treatment protocol for salivary mucocele includes intermittent aspiration and antibiotics.

False! A mucocele is an accumulation of saliva in the subcutaneous tissue and the consequent tissue reaction to saliva. The fact that a mucocele is not a cyst but is a reactive encapsulating structure has prompted surgical removal of the affected gland/duct complex. The exact etiology is unknown, but the lesion does not resolve unless the affected salivary gland and ducts are removed. The clinical signs associated with salivary mucocele depend on the location of the mucocele. The most common presenting history for cervical mucocele is a slowly enlarging or intermittently large, fluid-filled, non-painful swelling ***(Fig. 6)***. Blood-tinged saliva secondary to trauma caused by eating, poor prehension of food, or reluctance to eat are clinical signs of sublingual mucocele. *Clinical signs of pharyngeal mucocele include respiratory distress and difficulty in swallowing secondary to partial obstruction of the pharynx* ***(Fig.7)***. Diagnosis of salivary mucocele is based on clinical signs, history, and evaluation of aspirated fluid. Mucocele aspiration reveals a stringy, sometimes blood-tinged fluid with low cell numbers.

Fig.6 *A large cervical mucocele is shown on the ventral aspect in a Yorkshire Terrier dog.*

Fig.7 *Oral photograph showing a pharyngeal mucocele (arrow) that could be life-threatening.*

The most common defect location causing mucocele originates in the sublingual salivary gland/duct complex ***(Fig. 8)***. The intimate anatomic association of the sublingual and mandibular glands and their ducts requires resection of both structures. Surgical removal of both the sublingual and mandibular salivary glands, combined with drainage of the mucocele, has been advocated for treating cervical mucoceles.

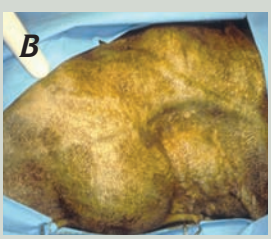

Fig.8 *A defect in the sublingual salivary gland/duct system (arrow) is responsible for mucocele (A). The surgical approach for cervical (B), pharyngeal, and sublingual mucoceles is the same and requires a surgical approach along the lateral neck (C).*

Pharyngeal and sublingual mucocele are treated by removing the mandibular and sublingual salivary glands, based on the common etiology of a sublingual gland/duct defect. Resective surgery is preferred for pharyngeal mucocele since life-threatening upper airway compromise or morbidity from swallowing dysfunction and aspiration pneumonia are potential complications of conservative management or recurrence.

Fig.9 *Tissue from a zygomatic salivary gland mucocele showing the gland's loss of normal structure and mucoid appearance.*

The zygomatic salivary gland can be affected by neoplasia, inflammation, or mucocele ***(Fig. 9)***. Surgical removal of the zygomatic gland is indicated either for neoplasia, which involves surgery as part of the treatment protocol, or for mucocele of zygomatic origin.

Smith MM. Approach to the mandibular and sublingual salivary glands. In: Smith MM, Waldron DR. Approaches for General Surgery of the Dog and Cat. WB Saunders; 1993; 84-87.