PHARYNGEAL MUCOCELE IN A DOG

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A 6 years old male Labrador retriever weighing 27 kg was presented with the history of dysphagia and respiratory distress since two days. On clinical examination a swelling was noticed at the oropharyngeal region. Physical examination of the swelling showed no pain, soft and fluctuant fluid filled mass. Oral cavity examination confirmed pharyngeal mucocele. Under general anaesthesia an 18G needle was introduced at the dependent area of the mucocele and the content was drained. The redundant pharyngeal tissue was excised and sutures the granulation tissue lining to pharyngeal mucosa (marsupialization). The animal recovered uneventfully.
Key Words: salivary mucocele, pharyngeal mucocele, Oropharyngeal swelling, dog

Introduction

The overall incidence of salivary gland diseases in dogs and cats is low, among that dogs are more frequently affected (Waldron and Smith, 1991). All breeds are susceptible, but some reports indicate that poodles, German shepherds, Daschshunds and Australian Silky terriers are more commonly affected and which predominantly occurred in small dogs (Hedlund and Fossum, 2007). Male dogs are more commonly affected (79%) than females and all age groups can develop mucocele. The sublingual salivary gland is most commonly involved (Dunning, 2003). The most common presenting sign might be dyspnea (50%). Saliva takes the path of least resistance, most commonly accumulating in the cranial cervical or intermandibular, sublingual or pharyngeal tissue (Benjamino, *et al.,* 2012). This paper reports successful management of pharyngeal mucocele in a dog.

Case History and Observations

A 6 years old male black coloured Labrador retriever weighing 27 kg was presented with the history of dysphagia and respiratory distress since two days and it was treated by field veterinarian with no improvement. On clinical examination a swelling was noticed at the oropharyngeal region and abnormal tongue movements. Physical examination of the swelling showed no pain, soft and fluctuant fluid filled mass. Oral cavity examination confirmed right side pharyngeal mucocele (Fig.) and surgical correction was resorted to.

Treatment and Discussion

Cefotaxime and meloxicam was administered intravenously @ 20 mg/kg b.wt and 0.2 mg/kg b.wt intravenously respectively preoperatively. The dog was premedicated with atropine sulphate @ 0.04 mg/kg b.wt intramuscularly followed by xylazine hydrochloride @ 1 mg/kg b.wt intramuscularly. General anaesthesia was induced with an anaesthetic mixture containing 100mg of ketamine hydrochloride and 2.5mg of diazepam @ 5mg/kg. bd wt of ketamine hydrochloride and 0.125mg/kg. bd. wt of diazepam intravenously. An 8 size cuffed endotracheal tube was introduced and airways was maintained. The anaesthesia was maintained with 1/3 to ½ of induction dose of above mixture intermittently as and when required.

The animal was positioned in ventral recumbency and mouth gag was applied. An 18G needle was introduced at the dependent area of the mucocele and the content was drain ed. The consistency of the content was thick mucoid fluid and around one liter of fluid was drained. The redundant pharyngeal tissue was excised to prevent airway obstruction and re-accumulation of the mucocele. Then suture the granulation tissue lining to pharyngeal mucosa (marsupialization) using No.1-0 polyglactin910 in a simple continuous manner.Post-operatively the animal was administered with injection of cefotaxime intravenously @ 20 mg/kg b.wt for five days. Advice to feed soft diet for 3 to 5 days and the animal recovered uneventfully.

Pharyngeal mucocele is a collection of saliva that has leaked from a damaged salivary gland or duct and is surrounded by granulation tissue (Hedlund and Fossum, 2007). Although diseases of the salivary glands are rare in small animals, mucocele is the most common clinically recognized disease of these structures in the dog, and the incidence of occurrence has been reported as fewer than 20 in 4000 dogs (Smith, 2005). The cause might be due to blunt trauma from a choke chain, bites to the neck,

foreign bodies, sialoliths, dirofilariasis and sudden hyperextension of the neck. In the present case blunt trauma in the form of choke chain might be the most probable inciting cause. The continuous pressure exerted by a very tight choke chain around the neck appeared to have damaged the duct complex leading to gradually increasing accumulation of saliva.

Right side Pharyngeal mucocele in a Dog

Pharyngeal mucocele should be differentiated with salivary gland tumors, infection with abscess in the neck due to a foreign enlarged lymph nodes, and embryonic cysts such as a thyroglossal cyst, cystic Ratheke's pouch, or a branchial cyst (Hedlund and Fossum, 2007). Salivary mucoceles are not cysts because they lack luminal epithelium and contain granulation tissue lining which originates from inflammatory reaction to free saliva (Yasonu, *et al.,* 2011). If a case is presenting with the history of acute respiratory distress, open mouth examination is necessary to rule out pharyngeal mucocele. Animals with acute respiratory distress and intubation may not be possible through mouth a temporary tracheostomy might be required and followed by emergency aspiration of the mucocele is required. Repeated drainage or injection of cauterizing or anti-inflammatory agents does not eliminate mucocele; however it complicates subsequent surgery by leading to abscessation or fibrosis. Mucocele rarely resolve without surgery. Complete excision of the involved gland duct complex and drainage of the mucocele is curative. Marsupialization heals quickly by second intension. Post operative complications are seroma formation, infection of mucocele and recurrence (Hedlund and Fossum, 2007). In the present case, no complications were noticed.

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