INTERNATIONAL JOURNAL OF SCIENCE AND NATURE

www.scienceandnature.org

Case Study

SALIVARY MUCOCELE IN AN INDIAN PARIAH DOG

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ABSTRACT
One two year old male pariah dog weighing 14 kg body weight was presented with complaint of anorexia, keeping the tongue out of its mouth cavity. On physical examination it revealed one large and heavy swelling at the base of the tongue. History, clinical signs and physical examination confirmed the condition as a case of salivary mucocele. Under mild general anaesthesia the mucocele was incised and the deposited fluid was drained out and cauterised with tincture of iodine with application of gauge pressure. Post operatively antibiotics and analgesics were administered and the animal recovered from the acute problem of inappetance and open mouth condition.

KEY WORDS: *Dog, Salivary mucocele, tincture of iodine.*

INTRODUCTION

Generally, the mouth cavity of dogs posses many salivary glands both within the lining of mouth and in the head and also at neck region. The most important salivary glands include parotid (located around the ear canal)), mandibular (located just behind the jaw bone), sublingual (located under the tongue) and zygomatic gland (located by the eye). A salivary mucocele (sialocele, salivary cyst, honey cyst) is a collection of saliva that has leaked from a damaged salivary gland or duct and is surrounded by granulation tissue. (Fossum, 2013). It may be a single or multilocuted cavity lined with connective tissue, contiguous to a salivary gland or duct (Brown, 1989, Dunning, 2003). In general, it is the sublingual gland that is involved; less frequently, the parotid and zygomatic glands (Brown, 1989). The most common places in which mucoceles associated with the sublingual gland develop are the cervical, sublingual, and pharyngeal areas (Brown, 1989; Waldron, 1991). Mucoceles are more commonly seen in breeds like dachshunds, German shepherds, poodles, and silky terriers that are at any age but also in other breeds.

The inciting cause of a salivary mucocele is usually not definitively identified; however, trauma from a choke chain, bites to the neck, and sudden hyperextension of the neck are suspected causes. These can cause stretching or tearing of the salivary gland or the duct that drains saliva from the gland to the mouth. Saliva accumulates under the skin and incites a marked inflammatory response. The diagnosis is based primarily on history, clinical sign and cytology findings. Complete excision of the involved gland duct complex and drainage of mucocele is the curative procedure (Waldron,1991). A case of a pariah dog affected with a large salivary mucocele was identified and treated successfully by incising and draining the fluid from the swelling with standard surgical procedures.

MATERIALS & METHODS

One male Indian pariah dog of 2 year old weighing 14 kg body weight was presented with heavily swollen tongue protruded to one side with anorexia and open mouth condition. Blood sample collected for complete blood count (CBC) and radiographic study was done in lateral and ventro-dorsal oblique position keeping mouth open. From history, symptoms, clinico-physical and radiographic examination with differential diagnosis it was diagnosed as a case of salivary mucocele, hence instant decision for surgery was undertaken. Preoperative antibiotics like ceftriazone sodium with tazobactam (Intacef Tazo 562.5) and analgesic meloxicam (Melonex) was administered. Under injectable general anaesthesia using atropine@0.04mg/kg body weight (b.wt.) ,xylazine@0.5mg/kg b.wt. and ketamine hydrochloride @ 5mg/kg b.wt the animal was prepared for surgery. Widening of mouth was done with mouth gag keeping aside of the affected side of the tongue. The mucocele looks as a duck's egg measured 6.5 X 3.5 centimeter located at the base of tongue. Incision was given on the swollen mass and the fluid was drained out, slight bleeding was controlled by application of gauge pressure soaked with Vassocon (Inj. Adrenaline). The interior mucosal lining was cauterised with tincture of iodine. Post operatively it was followed with same antibiotics and analgesic consecutively for 3 days. The animal was maintained with liquid diet for 3 days & thereafter with normal diet.

RESULTS & DISCUSSION

The lesions of mucocele have been associated with trauma, seeds and a foreign body, but, most commonly, the inciting cause is not known (Brown, 1989). In the present case it was a history of trauma followed by swelling of head and neck beaten with a wooden stick 2 months back which was subsided by treatment. The diagnosis is made by palpation and aspiration of the swelling. In general, the palpation is painless, except in the acute period or if infected (Brown 1989,Waldron, 1991). The fluid obtained is thick and golden colored, since there is no associated inflammation (Dunning, 2003). Abscess, tumor, and branchial cleft cysts must be differentiated from a salivary mucocele (Waldron,1991 ; Splangler et al, 1991). Although histological examination was not made in this case, the diagnosis was based on the history, clinical signs, localization of the condition and paracentesis. Some cases have been resolved by using periodic drainage, but surgical treatment is necessary to prevent recurrence (Waldron,1991). Since the animal was unable to take feed and water and feeling very uneasy by the protruded tongue aside hence prompt surgical intervention was undertaken with drainage of fluid along with cauterisation by application of tincture of iodine in order to prevent further reoccurence.

FIGURE 1: Showing the sedated animal with the suture lining of previously operated site of neck tumour

FIGURE 2: Showing the Salivary mucocele below the tongue

FIGURE 3: Showing the incision of ranula and cauterisation with iodine solution

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