



The Management of Recurrent Sublingual Sialocele In A Feedlot Sokoto Gudali Bull: A Case Report

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ABSTRACT

A 5-year-old Sokoto Gudali bull was presented with complaint of recurrent soft and flocculent swelling beneath the tongue. Careful clinical assessment led to a diagnosis of sublingual sialocele. A sialocele is a subcutaneous cavity containing saliva which is surrounded by tissue reaction to saliva. An aspirate of the fluid revealed a clear viscid content with neutrophils, lymphocytes and monocytes. The case was managed surgically by marsupialization. Recovery was “uneventful” and was found to be normal 2 months post-surgery. It was concluded that marsupialization technique may be a permanent remedy for recurring sublingual sialocele in cattle.

Key words: Sialocele, Marsupialization, Sokoto Gudali bull

INTRODUCTION

Sialocele has been reported to be the most common affection of salivary glands in several species of animals and man but it is rare in the bovine species [1]. A salivary sialocele or mucocele, is a collection of saliva that has leaked from a damaged salivary gland or salivary duct and has accumulated in the tissues with consequent reaction of such tissue to saliva [1, 2]. The exact cause of a sialocele may be difficult to establish. However, trauma has been incriminated as the most likely cause of the condition. Some growths such as those that obstruct the salivary ducts may also result in leakage of saliva and mucus into the surrounding tissues. In the management of this condition, excision of the affected salivary gland would have been the ideal. This is however, not without some complications like formation of seroma and also possible damage to adjoining vital structures [1]. These disadvantages have led to the adoption of a less complicated procedure known as marsupialization for the management of the condition. Marsupialization is a surgical technique which converts a cyst into a pouch with resultant decompression. This leads to the relieve of pressure within the cyst and also changes therein due to its exposure to the oral environment [3]. The technique also causes the cyst lining to undergo some histologic changes which results in eventual replacement of the cyst lining by oral epithelium [4]. This technique also has a disadvantage of recurring in 61%-89% of cases if not properly managed [5].

CASE PRESENTATION

A 5-year-old Sokoto Gudali beef bull weighing 420kg was presented to the Veterinary Teaching Hospital Ahmadu Bello University, Zaria with complaints of excessive salivation and

inappetence of 6 weeks duration. History also had it that several unsuccessful attempts were made to treat the condition by aspiration of the content of the swelling but it recollected only a few days after the procedure. On general physical examination, the vital parameters of the bull were all within the normal physiological values. Examination of the buccal cavity revealed a large flocculent and painless swelling of about 7×5cm on either side of frenulum linguae (Figure. 1). With this finding, tentative diagnosis of sialocele was made. The bull was restrained on left lateral recumbency. A clear and viscous fluid typical of saliva was recovered on aspiration of the content of the swelling. Clinical pathological examination of the aspirate revealed normal inflammatory cells which included neutrophils, lymphocytes and monocytes.

Local infiltration with 8ml of 2% Lignocaine hydrochloride was done around the the base of the swelling. Treatment was achieved by puncturing the swelling using the tip of a scalpel blade after which the viscid contents was drained. Thereafter, a permanent approach which was marsupialization of the cyst wall was considered and achieved with size 2.0 chromic catgut by placing 6 stitches of simple interrupted sutures. Ten mililitres of diluted tincture of iodine was injected into the surrounding tissue. Oxytetracycline 20% was also injected intra muscularly at 20 mg/kg body weight. This condition should be differentiated from actinomycotic or foreign body abscesses.



Fig. 1: A photograph of bilateral swelling of frenulum linguae containing saliva in a Sokoto Gudali Bull

DISCUSSION

Sialocele has been reported to be a rare condition in cattle [1]. This report presents a case of successful treatment of a sialocele in a Sokoto Gudali bull. As deduced from history, the cause of this condition is not certain. However, since trauma has been incriminated as a possible cause [6, 7], this case may have resulted due to sharp objects in the feed of the animal which pierced the duct from the exterior. The inflicted injury may have resulted in leakage of saliva into the surrounding tissues with subsequent irritations of the surrounding tissues due to the presence of digestive enzymes present in the saliva. A permanent approach to the treatment by marsupialization was carried out which is based on the principle that cysts will shrink to smaller more manageable size when decompressed. The procedure involved the suturing of the cyst wall to the opening created. This was considered and preferred over the complete removal of the affected salivary gland which may subsequently result in the formation of seroma due to the space created and may also require a surgical drainage. Marsupialization ensures continuous drainage of content until healing ensues, thus, preventing

recollection of fluid in the cavity. To enhance formation of granulation tissue as recommended by Baumash [8], tincture of iodine was injected into the tissue around the cavity. This is necessary because if granulation tissue is not adequately formed and the cavity does not close, there are chances of recurrence which might necessitate another surgery.

This case was successfully treated without untoward outcome 2 months post-surgery. However, according to Tsioli *et al.* [9], a larger number of cases are needed to confirm the effectiveness of this treatment option.

Conflict of Interest

The author declares that there is no conflict of interest

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