

MANAGEMENT OF AN EXTRAORDINARY LARGE MUCOCELE OF THE TONGUE WITH UNUSUAL PRESENTATIONS

*MUZAFFAR KHAN, BDS (Peshawar), Dr med dent (Germany)

**ALI AKHTAR KHAN, FCPS-II Trainee

***SHAHNAZ MUZAFFAR

INTRODUCTION

Occlusion of the duct of minor salivary gland by desquamated epithelium or traumatic injury and thereby extravasation of the mucous or serous secretion into the interstitium of the gland or surrounding tissue leads to the pathogenesis of Mucocele.^{1,2,3} Principally mucocele can occur in all areas of oral cavity covered by epithelium except anterior of the hard palate & fixed gingiva which are proven free zones of minor salivary glands².

The favoured location is in the lower lip near the angle of the mouth³. The colour of the mucocele depends upon the nature of its fluid content and therefore varies from pale pink to magenta depending upon whether or not hemorrhage in to the mucoid fluid has occurred³. The size varies from a small pea-shaped elevation to a some what larger, irregular ovoid enlargement.

A case of mucocele, extra ordinary large in size (3.5 x 3x 3.2 cm) located on unusual site (Lumen of anterior 1/3rd of tongue), with a history of too long duration (13 years) and of unknown etiology and unusual presentation.

Key words: Mucocele, minor salivary glands, anterior of the tongue. Glands of Blandin and Nuhn.

CASE REPORT

A 13 years old boy Jawad Hussain, resident of Kewera, reported on 3.12.2004 in Maxillofacial Surgical Unit of Zohra Nursing Home (Iftikhar Janjua road, Rawalpindi) with the complaints of swelling of the tongue since 13 years, difficulty in speech and swallowing for the last 7 months.

According to the statement of the parents, a small papule was noticed on the undersurface of the tongue few days after the birth of JH which increased in size very slowly (Fig-1). After 03 years the papule disappeared, and tip of the tongue got swollen. As there was no complaint by the patient so the swelling was ignored for about 10 years. During the last 7 months the swelling of the tongue increased very rapidly and the patient started complaining of difficulty in speech and swallowing. He visited a local clinic where he was diagnosed as suffering from "malignant growth" of the tongue and was referred to Maxillofacial Department of Zohra Nursing Home, Rawlapindi for expert opinion and treatment.

Examination

A young boy of average built and height, was found otherwise physically fit. The tongue was freely mobile and enormously large in size (Figs-1, 2). On palpation

For Correspondence: * Brig Muzaffar Khan (R), BDS (Peshawar), Dr med dent (Germany) Maxillofacial Surgeon, Zohra Nursing Home, Iftikhar Janjua Road, Rawlapindi Cantt, Pakistan

** Maj Ali Akhtar Khan, FCPS-II Trainee, AFID, Rawalpindi

***Dr (Miss) Shahnaz Muzaffar , Lecturer Margalla College of Dentistry, Islamabad

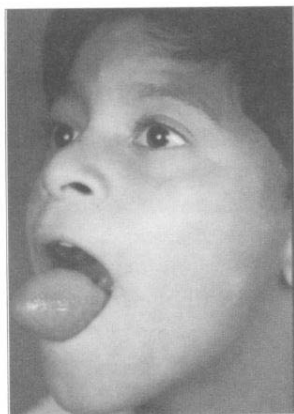


Fig 1

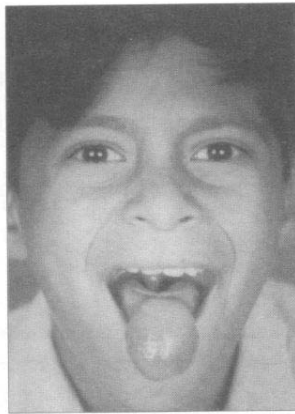


Fig 2

the tip of the tongue was felt soft in consistency, ball like reaction was elicited simulating to cystic growth. Intra oral radiograph revealed cystic radiolucency. Case was discussed in Head & Neck tumor conference, in the light of history, clinical examination and radiographic finding. The case was diagnosed provisionally as mucocele and further investigations of FNAC and MRI of the tongue were advised. MRI showed cystic lesion in the anterior tongue simulating to Inclusion cyst, while FNAC test *suggested* mucous retention cyst. Enucleation of the mass was decided and differential diagnosis of myxoma, haemangioma, fibroma along with mucocoele were kept in mind.

PROCEDURE

Under general anesthesia and in aseptic condition, the tongue was pulled forward by passing two stitches on the tip of the tongue bilaterally. A Door incision was made on the dorsum of the tongue starting from the mid up to the tip of the tongue. (Fig-3) The flaps were undermined and the mass was unroofed (Fig-4). The mass was enucleated and sent to AFIP for microscopy. Hemostasis were achieved using pressure pack and

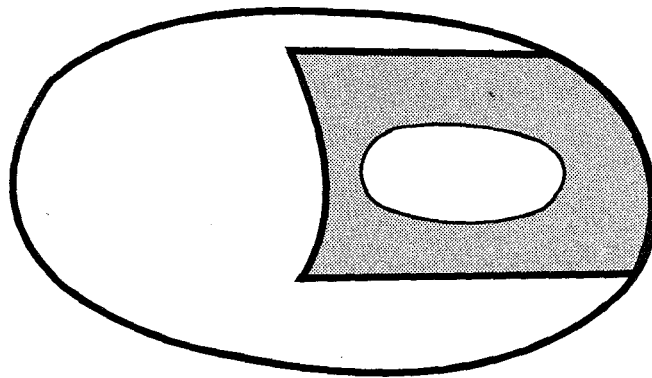


Fig 4

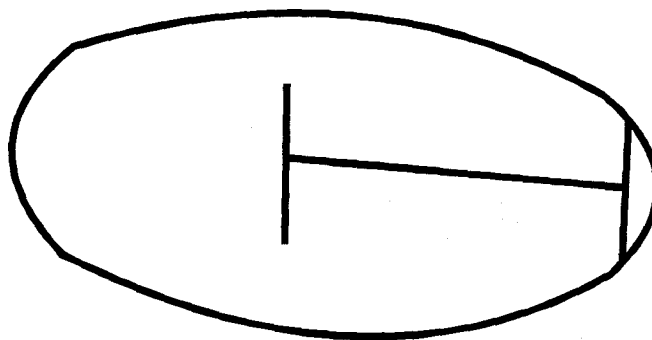


Fig 5

diathermy. The flaps were repositioned and stitched with 000 silk (Fig-5). Patient was placed on systemic antibiotics, analgesics and liquid diet for 05 days. Stitches were removed on 07 post operative day. The histopathological report confirmed the diagnosis of Mucocele. Post operative (3 months) Photographs show almost normal tongue with normal function and no evidence of recurrence. (Fig-6a & b)

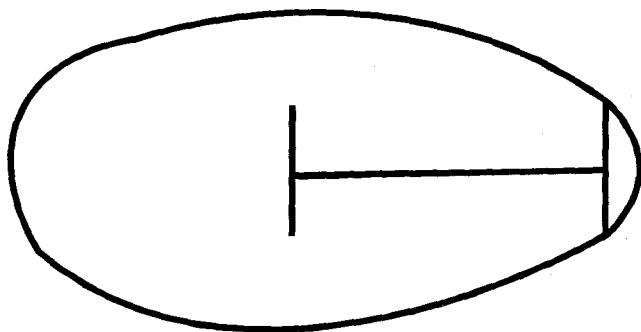


Fig 3

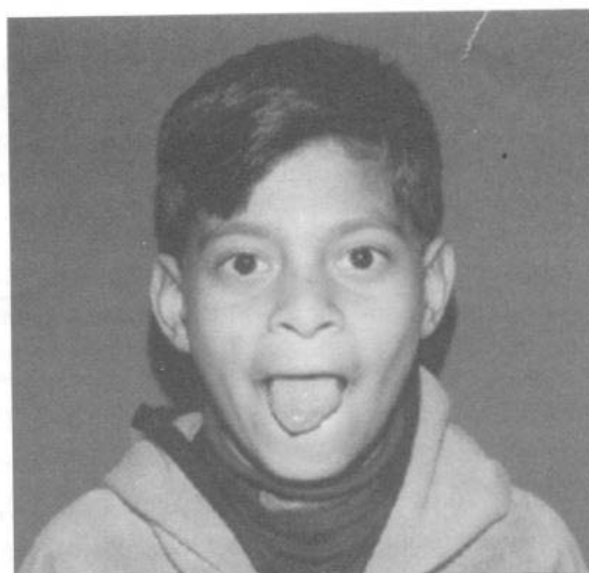


Fig 6a

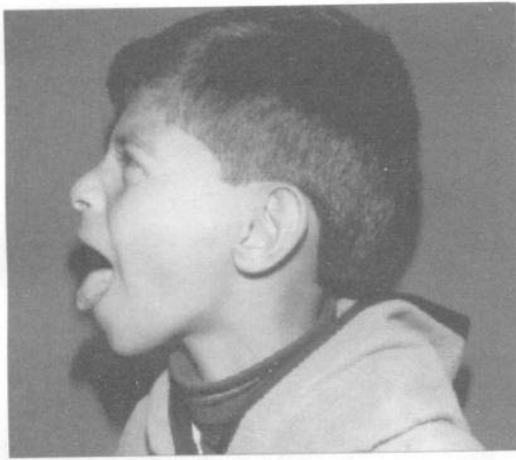


Fig 6b

DISCUSSION

The human tongue contains 3 distinct sets of minor salivary glands. The glands of von Ebner, the glands of

Weber, and the glands of Blandin and Nuhn⁵. The glands of Blandin and Nuhn are mixed mucous and serous glands that are embedded in the musculature of anterior tongue ventrum. They are neither lobulated nor encapsulated. Each gland is approximately 8mm wide and 12-25 mm deep and consists of several small independent glands. They drain by mean of 5 or 6 small ducts that open near the lingual frenum^{5,6,7}. Mucocoeles on the tongue are uncommon (2.5%). Of 400 mucocoeles reviewed by Harrison only 9 arose on the tongue'. Haimansohn⁹ reported a 14 years old girl with an asymptomatic raised bluish mass on the middle 3rd of the tongue ventrum measuring 10 x 6 mm. Ellis et al⁸ reported a 19 years old woman with an symptomatic bluish non ulcerated fluid filled mass on the tongue ventrum measuring 20 x 10 mm. Mandel and Kaynar¹⁰ reported a 26 years old woman with an asymptomatic bluish fluid filled swelling on the tongue ventrum measuring 30 x 74 mm. The author has seen and treated only one case (The current case) of mucocoele in his 32 years professional life.

All these mucocoeles of minor salivary glands (Blandin and Nuhn) of tongue present as vascular lesions, pyogenic granulomata, polyps or squamous

papillomata depending on their degree of vascularity, scarring and acinar atrophy. It was the great educational reformer Postalozzi who said, "Observation is the basis of all recoveries" and this holds true very particularly for the detection of all oral lesions.

A history of trauma and recovery of mucus with fine needle aspiration is helpful in the clinical diagnosis of mucocoele of the glands of Blandin and Nuhn as are the following characteristics of mucocoele: Rapid onset increase and reduction in size, bluish colour and fluid filled consistency. During surgery the glands that are deep in the tongue musculature are commonly left behind, resulting in persistence of the lesion. Clinical careful evaluation of these lesions and preoperative awareness of the surgical anatomy of the glands of Blandin and Nuhn may minimize the need for repeated surgical procedures.

REFERENCES

- 1 Backer, R.und Morgenroth; K. Pathologic der Mundhohle Georg. Thieme Verlag Stuttgart 1979.
- 2 Bengel, W.U. Veltman, G. "Differential diagnostik der. Mundschleimhauterkrankungen" Quitessenz Verlags - Gmbh. 1986.
- 3 Orban and Wentz. Atlas of clinical pathology of the oral mucous membrane. 2^d edition. St Louis the C.V. Mosby company 1960.
- 4 Burkhardt, A. Maerker, R. A colour atlas of Oral cancer. Wolf. Medical publications Ltd 1981.
- 5 Sugerman, P.B. Savage. N.W. and Young. W.G. Mucocoele of the anterior lingual salivary glands (Glands of Blandina Nuhn). Report of 5 cases. Oral surg Oral med oral pathol Oral radiol endod 2000;90:478-82.
- 6 Tandler B, Pinkstaff C.A. Riva. A. Ultrastructure and histochemistry of human anterior lingual glands (Glands of Blandine & Nuhn) Anat. Rec 1994;240:167-77.
- 7 Harrison SD. Salivary mucocoeles. Oral surg oral med oral pathol 1975;39:268-78.
- 8 Ellis E 3rd , Scott. R. Upton Lg. An unusual complication after excision of a recurrent mucocoele of the anterior lingual glands oral surg oral med. Oral pathol 1983;56: 467-71.
- 9 Heimansohn HC. Mucocoele of anterior lingual tongue glands. Report of a case Dent Dig 1970;76:470-1
- 10 Mandel L Kaynar A. Mucocoele of the gland of Blandin-Nuhn N.Y. Stat. Dent. J. 1992;58;40-1.