**AN USUALLY LARGE DERMOID CYST IN FLOOR OF MOUTH:**

**A CASE REPORT**

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**ABSTRACT**

Dermoid cysts in the floor of mouth are uncommon, and the effective treatment is surgical excision. We present our experience of an enormous sized 8mmx7mm in dimension sublingual submental dermoid cyst. Evaluating the clinical features and the external approach using visor flap removing the cyst adds upto the experience of removing these large submental dermoid cysts, with no recurrence and better cosmetic results.

**Keywords:** Dermoid cyst

**INTRODUCTION**

Dermoid cysts are benign lesions. Primarily seen in the testes and ovaries(1). 6 % of all dermoid cysts can occur in the head and neck (1,2). Implantation dermoid cyst arises from the epithelium that has been entrapped in deeper tissue either during embryogenesis or by traumatic implantation. The content of dermoid cyst can contain a variety of tissue from three germinal layers and most often they are formed along lines of embroygenic origin. Dermoid cysts usually occur in young adults in their 2nd and 3rd decades; however they may also occur in infants. There is no gender discrimination (2). Histologically, there are three types of dermoid cysts; epidermoid, dermoid, and teratoid. Usually, the term of dermoid cyst is used for all of these types in clinical practice. Sublingual dermoid cyst cases usually present themselves as a painless swelling in the floor of mouth. In addition, these patients might also experience dysphonia, disarticulation, dysphagia, and dyspnea symptoms (3). Submental dermoid cyst cases may present themselves with a swelling that may cause double-chin deformity. Treatment of dermoid cysts is by surgical excision; by extraoral, intraoral or combined approaches. Some authors believe that the treatment consists of excision by intraoral approach in sublingual cysts and extraoral approach in submental cysts (4,5). Recurrence is rare when the cyst is completely removed (6). This is a case report of an enormously large sub mental dermoid/sub lingual cyst, which was excised with an extra oral approach using visor flap incision. A sublingual dermoid may be median or lateral in position. It may be situated above or below the mylohyoid muscle. It shines through the mucosa as a white mass in contrast to the translucent nature of the ranula. A submental dermoid develops below the mylohyoid and presents as a submental swelling behind the chin.

**CASE REPORT**

A young thirty years old female presented in outpatient department of ENT. She was resident of district Kasur. Patient was in usual state of health six years back when she developed swelling in floor of mouth which gradually started to increase in size. The lady had a huge swelling in floor of mouth ranging from 8mm x 7mm in dimensions on presentation. She had complaint of difficulty in eating, difficulty in breathing and difficultly in articulation because of the size of the swelling. She also had history of repeated aspirations and incision drainage of the swelling from local hospitals in her district. The examination revealed a soft, cystic and fluctuant swelling. It yield to pressure of finger and would not slip away. The transillumination was negative; it was putty in consistency, with no cough impulse. The age, gender, symptoms, physical examination findings, localization, radiological investigations were carried out. Patient was examined by inspection and bimanual palpation. Patient underwent surgery under general anesthesia. According to the size and location of the cyst, the extra oral approach using Visor flap was planned. The cyst was excised intoto. Recovery of the patient was un remarkable. Cyst was examined histopathologically for final diagnosis. It was completely excised with no evidence of recurrence after a follow up of two months.



**Figure 1.** Side view pre-op



**Figure 2.** Swelling displacing the tongue up

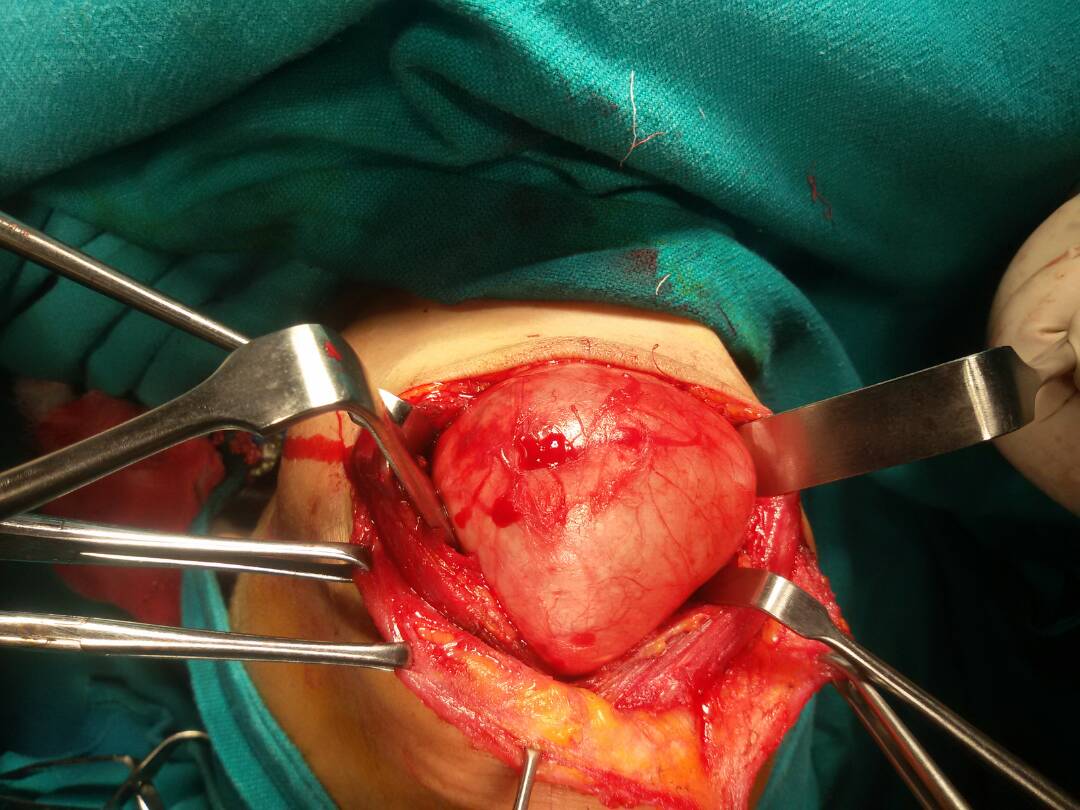


Fig: 3

Surgery through external approach



**Figure 4 :** Preop CT SCan

**DISCUSSION**

Anatomically, the dermoid cysts of the floor of mouth are classified into four types according to their relationship with the muscles in the floor of mouth: Sublingual (above the mylohyoid

muscle, 52.5%), submental (below the mylohyoid muscle, 40.4%), sublingual-submental (11.6%) and lateral (submandibular, 18.2%) (6). In our case, it is a sublingual-submental located dermoid cyst. Complete surgical excision is the only treatment for dermoid cysts. Different surgical techniques are reported in the literature. These techniques are the extraoral approach, the intraoral approach, the combination of these two methods, and the assisted endoscopic intraoral approach (8). Depending upon the site and size of the dermoid cyst excision can be planned. The intraoral approach is preferred for sublingual located cysts. However the extraoral approach is preferred in submental and submandibular located cysts (9). The extraoral approach may be preferred to or combined with the intraoral approach in larger sublingual cysts and cysts with submental component. The most commonly used approach according to the literature is the intraoral approach (7). The benefits of intra oral approach according to the literature include better cosmetic and functional results (8). This approach is usually performed with an incision along the ventral face of tongue, preserving both of the submandibular gland ducts. If the size of the cyst is large enough then some of the cyst content may be aspirated with a needle for safe removal of the larger cysts. The only complication observed with the intraoral approach reported in the literature is the excision of submandibular duct during the

operation (9) . The extraoral approach is usually performed in cysts that are submental, submandibular, infected or which cause airway obstruction (3). In addition, the extraoral approach may be combined with the intraoral approach in giant cysts or in the case of complications encountered during operations (10). We have preferred the extraoral approach in our patients due to the location of the cysts in the submental and submandibular regions. And also do the enormous size of the cyst ranging from 8mm x 7mm in dimension. Follow-up for 2 months period revealed that the patient was treated without any complications. The only disadvantage was the incisional scar

**CONCLUSION**

Large sublingual submental dermoid cysts are very rare, so most otolaryngologists surgeons will probably see few cases in their lifetime. In order to a guideline for surgeons, we can say that these cysts can be easily dissected from surrounding tissues and excised totally. Therefore, no excessive surgery is required, so, in our opinion, small incisions are adequate, and the surgeon must consider the cosmetic results much more.

**REFRENCES**

1. Turetschek K, Hospodka H, Steiner E (1995) Case report: epidermoid cyst of the floor of the mouth: diagnostic imaging by sonography, computed tomography and magnetic resonance imaging. Br J Radiol 68(806): 205-207.
2. Kandogan T, Koc M, Vardar E, Selek E, Sezgin O (2007) Sublingual epidermoid cyst: a case report. J Med Case Rep 1: 87.
3. MacNeil SD, Moxham JP (2010) Review of floor of mouth dysontogenic cysts. Ann Otol Rhinol Laryngol 119(3): 165-173.
4. Gibson WS, Fenton NA (1982) Congenital subingual dermoid cyst. Arch Otolaryngol 108(11): 745-748.
5. Zachariades N, Skoura-Kafoussia C (1990) A life threatening epidermoid cyst of the floor of the mouth’ Report of a case. J Oral Maxillofac Surg 48(4): 400-403.
6. Eken M, Evren C, Sanli A, Bozkurt Z (2007) An alternative surgical approach for sublingual dermoid cysts: a case report. Kulak Burun Bogaz Ihtis Derg 17(3): 176-178.
7. Howell CJ (1985) The sublingual dermoid cyst. Report of five cases and review of the literature. Oral Surg Oral Med Oral Pathol 59(6): 578-580.
8. Longo F, Maremonti P, Mangone GM, De Maria G, Califano L (2003) Midline (dermoid) cysts of the floor of the mouth: report of 16 cases and review of surgical techniques. Plast Reconstr Surg 112(6): 1560-1565.
9. Akao I, Nobukiyo S, Kobayashi T, Kikuchi H, Koizuka I (2003) A case of large dermoid cyst in the floor of the mouth. Auris Nasus Larynx 30 Suppl: S137-S139.
10. Mathews J, Lancaster J, O’Sullivan G (2001) True lateral dermoid cyst of the floor of the mouth. J Laryngol Otol 115(4)