*IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*
*e-ISSN: 2279-0853, p-ISSN: 2279-0861.Volume 22, Issue 1 Ser.9 (January. 2023), PP 24-27*
*www.iosrjournals.org*

# A case Report of Surgical enucleation of Dermoid cyst of the Mouth.

BahaaAwadallahKhair [(1)], Abdelmoneim Ibrahim Elniel[(2)],
Limia Norelrahman Ahmed[(3)]

*(1) Assistant professor in the Oral and Maxillofacial Surgery Department In National Ribat University*
*(2) Associate professor In Oral and Maxillofacial surgery Department in National Ribat university*
*(3) Resident in Oral and Maxillofacial surgery Department Arab Board of Medical Specialization*

***Abstract:***
*A case of dermoid cyst of the floor of the mouth at National Ribat University will be discussed since its rare and interesting appearance of a double chin made the patient seek treatment*
*The mass was removed intraorally without complication.*

---

Date of Submission: 10-01-2023 Date of Acceptance: 27-01-2023

---

## I. Introduction:

A dermoid cyst is a Benign cyst that arises embryologically from the ectoderm either congenitally in the embryonic life or due to trauma [3,12]. Dermoid cysts are usually misdiagnosed with cystic lesions of the sublingual gland [1,2,11]. and they are lined by epidermis-like epithelium with stratified squamous epithelium lining being the most dominant [3 ] .it contain keratin within the cystic cavity [2,4]
Dermoid cysts on the floor of the mouth are very rare; they represent 1.6% of all dermoid cysts that can occur in different parts of the body including the head neck and ovaries.[1,5].

## II. Case Report

A 21 **years old Sudanese male** who is generally fit with no significant medical history & no family history of interest, presented to the oral and maxillofacial surgery clinic at Al Ribat National Hospital complaining of pain less firm mass in the midline of the submental region presented five years ago and had since slowly increased in size, the patient showed no signs of dysphonia, dysphagia or airway distress nor obstruction, the patient has denied any history of habits (smoking, snuff dipping or alcohols drinking), main complain was an esthetic reason; the double chin presentation.

**Clinical examinations**

***Extraoral Examination*** showed a non-tender, compressible, soft, mobile, fluctuant with well-defined palpable margins and oval-shaped swelling of (5*3 cm) in diameter within the submental region that caused double chain presentation. with intact non-ulcerated, normal overlying skin in color, texture & temperature (no discoloration, no bruises, or pulsation), without apparent sinus discharge, skin tethering, scarring, or any dilated blood vessels, it shows no change in size during meals, patient position nor weather changes. On palpation, it was neither hot nor had thrills or bruits (non-pulsatile)—[**Figure 1].**
The patient shows no signs of numbness, muscular paralysis, or any abnormal sensation.

***Intraoral Examination*** revealed normal mouth opening with good oral hygiene, there was a slight posterosuperior displacement of the tongue with an elevation of the mouth floor, with no restriction in tongue movement, nor change in its structure or texture, & no change in the color nor the texture of the mucosa overlying the floor, there was normal sublingual & submandibular glands' ducts opening (Bartholin & Wharton), otherwise there was no apparent soft palatal swelling or deviation of the uvula, the bimanual examination of the mass gave doughy fluctuant sensation.

Neither Cervical lymphadenopathy nor other masses were present.

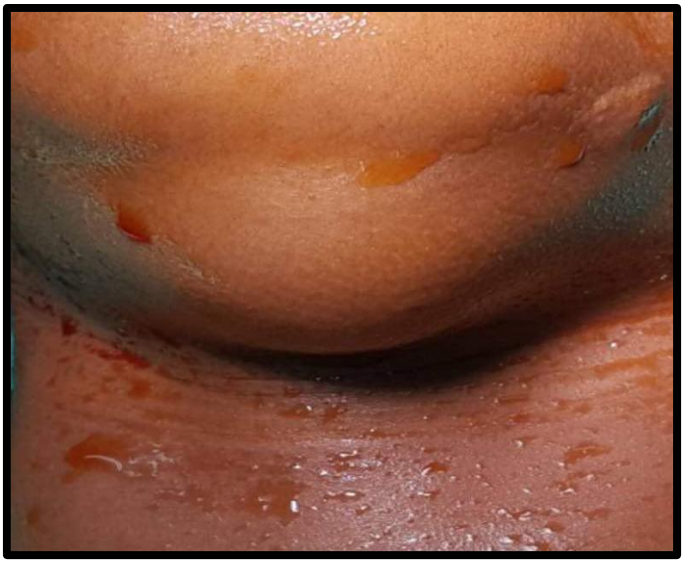

**Fig 1** Frontal profile showing submental swelling (double chin presentation)

**Investigation**

*Needle aspiration* with a disposable needle was negative, *CT Scan: coronal plane* revealed a well-circumscribed unicystic lesion 5*3 cm in diameter located just above the mylohyoid muscle on the floor of the mouth with no apparent calcifications. **[Figure 2].**

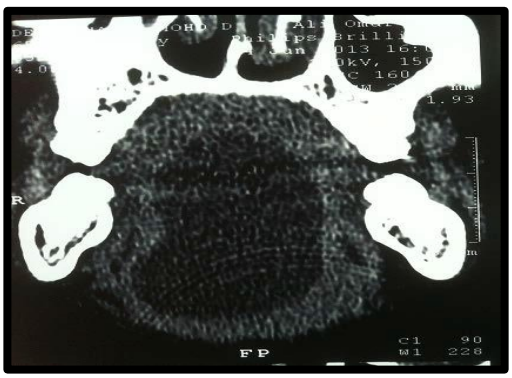

**Fig 2:** coronal ct scan showing a well-demarcated mass in the floor of the mouth

Procedure Done: Surgical removal of the lesion was done under general anesthesia through the intraoral approach, the mass was completely removed fig 3, 4 with preservation of Wharton's duct and lingual nerve.

Macroscopic examination revealed a yellowish bilobed mass with yellowish content, the diameter of the mass was approximately 7cm*5cm*4cm mass. fig 6

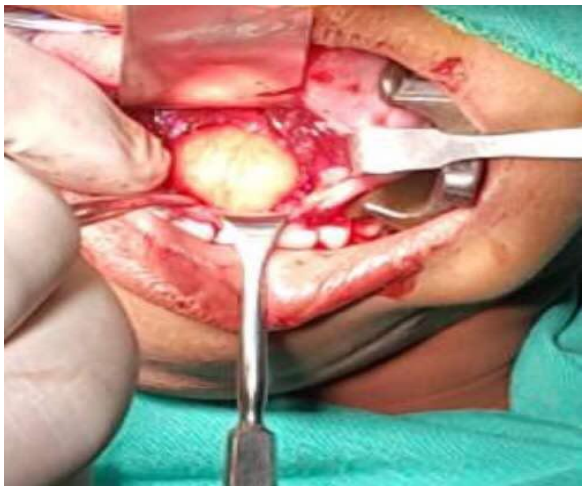

Fig 3 Intraoral approach

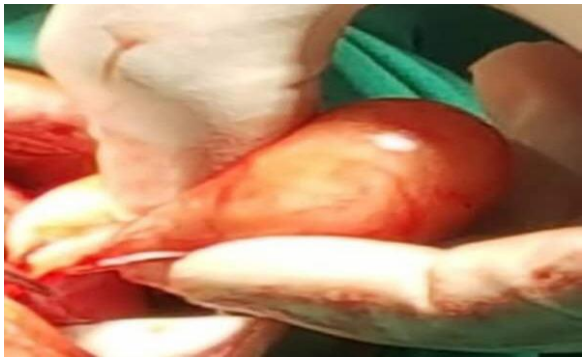

Fig 5 Removal of the mass

Histopathology result showed a space of a cystic lesion with the lining of orthokeratinized stratified squamous epithelium and sebaceous glands and hair follicles, the final diagnosis was a Dermoid cyst.

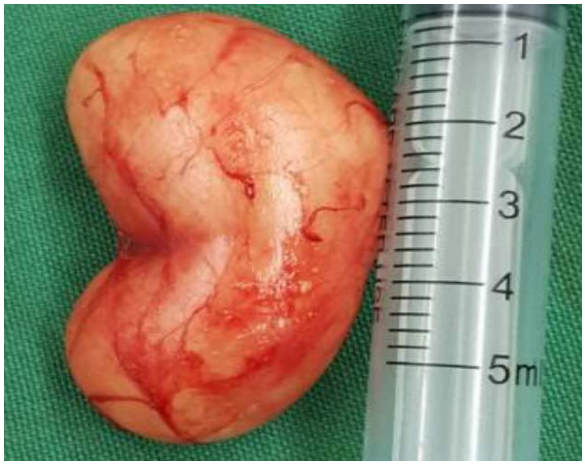


Fig 6 Macroscopic appearance

## III. Discussion:

Erich in 1974 studied dermoid cysts in the head and neck region [5]and he found that only 1.6% were located on the floor of the mouth between all Dermoid Cysts that occur in the head and neck region with a percentage of 7 % [6,8,9].

Dermoid Cyst usually presents as a soft painless sub-lingual or submental mass with a gradual increase in size, that can develop at any age but appears mostly between 2nd and third decades with no sex prodominance,[4,10]

Most patients are not familiar with the lesion until it interferes with their daily lives activity such as eating or speaking [4].

Sublingual Dermoid Cyst gives g the appearance of a ‘‘double chin’’ when it develops below the Geniohyoid muscle causing tongue displacement in a few cases reported [3,4,7].

Cysts of the floor of the mouth; mucocele and ranula, cystic hygroma, thyroglossal duct cyst, and the branchial cleft cyst should be considered as a deferential diagnosis to Dermoid Cyst, and in cases of infection, Ludwing Angina could be considered.[4,13].

Recurrence and malignant transformation to squamous cell carcinoma are very unlikely to occur[7].

Dermoid Cyst can be classified as a benign cystic form of a teratoma, it lacks tissue from the three germ layers therefore it's not a true teratoma [4.]

Treatment for dermoid cysts is surgical removal with complete enucleation of Cysts, extraoral approach could be considered for cysts that develop below the Geniohoid muscle[7]

## IV. Conclusion:

We are presenting a case of a dermoid cyst on the floor of the mouth which is considered to be rare.
the case was managed and the lesion was surgically excised using an intraoral approach, with no recurrence.

## References:


[1]. King RC, Smith BR, Burk JL. Dermoid cyst in the floor of the mouth: a review of the literature and case report. Oral Surg OralMed Oral Pathol 1994;78:567—76.

[2]. Longo F, Maremonti P, Mangone GM, et al. Midline dermoid cyst of the floor of the mouth: report of 16 cases and review of surgical techniques. Plast Reconst Surg 2003;112(6):1560—5.

[3]. Seward GR. Dermoid cysts of the floor of the mouth. Br J OralSurg 1965;3:36—47.

[4]. Neville BW, Damm DD, Allen CM, Bouquot JE. Oral and maxillofacial pathology. 3rd ed. St. Louis: Saunders Elsevier; 2009. p. 33–5.

[5]. Akinosi JO. Multiple sublingual dermoid cysts. Br J Oral Maxillofac Surg 1974;12:235—9.

[6]. Di Francesco A, Chiapasco M, Biglioli F, Ancona D. Intraoral approach to large dermoid cysts of the floor of the mouth: a technical note. Int J Oral Maxillofac Surg. 1995;24:233–5.

[7]. Acree T, Abreo F, Smith B, et al. Diagnosis of dermoid cyst of the floor of the mouth by fine-needle aspiration cytology: a case report. Diagn Cytopathol 1999;20(2):78—81.

[8]. Kramer IRK, Path FRC, Pindborg JJ, Shear M: The WHO histological typing of odontogenic tumors. Cancers 1992, 70:2988-2994.

[9]. J. L. Vargas Fernandez, J. L. Rojas, J. A. Fern ´ andez, and M. S. Quevedo, “Dermoid cyst of the floor of the mouth,” Acta Otorrinolaringologica Espanola, vol. 58, no. 1, pp. 31–33, 2007

[10]. Meyer I. Dermoid cysts (dermoid) of the floor of the mouth. Oral Surg Oral Med Oral Pathol. 1955;8:1149–64.

[11]. C. B. Teszler, I. A. El-Naaj, O. Emodi, M. Luntz, and M. Peled, “Dermoid cysts of the lateral floor of the mouth: a comprehensive anatomy-surgical classification of cysts of the oral floor,” Journal of Oral and Maxillofacial Surgery, vol. 65, no. 2, pp. 327–332, 2007

[12]. Erich JB. Sebaceous, mucous, dermoid, and epidermoid cysts. AmJ Surg. 1940;50:672.

[13]. C. B. Teszler, I. A. El-Naaj, O. Emodi, M. Luntz, and M. Peled, “Dermoid cysts of the lateral floor of the mouth: a comprehensive anatomy-surgical classification of cysts of the oral floor,” Journal of Oral and Maxillofacial Surgery, vol. 65, no. 2, pp. 327–332, 2007


Bahaa Awadallah Khair, et. al. “A case Report of Surgical enucleation of Dermoid cyst of the Mouth.” *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 22(1), 2023, pp. 24-27.