

#### A RARE CASE OF INTRAORAL MASS: MATURE CYSTIC TERATOMA

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#### Özet

### Abstract

#### NADİR BİR AĞIZ İÇİ KİTLE OLGUSU: MATÜR KİSTİK TERATOM

Teratomlar pediatrik yaş grubunda karşılaşılan orta hat kitlelerindendir. Daha çok gonadal ve sakrokoksigeal yerleşimli tümörler olup erken yaşlarda tanı alırlar. Baş Boyun bölgesinde çok nadir görülürler. Bu yazıda sublingual bölgede lokalize matür kistik teratom (MKT) saptanan hastanın, klinik, radyolojik bulgularının ve cerrahi tedavi sonuçlarının sunulması amaçlanmıştır. Yirmi üç yaşında bayan hasta yaklaşık bir yıldır ağız içinde dil altında şişlik şikayeti nedeniyle tarafımıza başvurdu. Kitle genel anestezi altındaintraoral sublingual hat insizyonu ile total olarak çıkartıldı. orta Histopatolojik incelemede kitlenin lümeninden kıllı sebase materyal boşalan matür kistik teratom olduğu tespit edildi. Sonuç olarak boyundaki kitlesel lezyonlarda, özellikle radyolojik olarak saptanan düzgün kontur ve heterojen, semisolid-kistik natür mevcutsa; ayırıcı tanıda, her ne kadar nadir olarak görülsede teratoid orjinli tümörlerin de düşünülmesi gerektiği kanaatindeyiz.

Anahtar kelimeler: Teratom, Baş boyun tümörleri, Ağız boşluğu

A RARE CASE OF INTRAORAL MASS: MATURE CYSTIC TERATOMA

Teratomas are midline tumors of the pediatric age group. They are mostly located at gonadal or sacrococcygeal region and are diagnosed at young ages. They are rarely seen in the head and neck region. We report a rare case of mature cystic teratoma in the sublingual area and discuss the clinical presentation, diagnosis, and treatment approaches. The 23-year-old female patient presented with a swelling under the tongue that had been present for nearly a year. Radiologic evaluation revealed regular borders, displacing the tongue superiorly semisolid-cystic mass on the floor of the mouth. The mass was totally excised under general anesthesia with an intraoral sublingual mid-line incision. Histopathological examination revealed that the mass was a mature cystic teratoma with hairy sebaceous material in the lumen. In conclusion, we believe that teratoid tumors should also be considered in the differential diagnosis of neck lesions especially if the mass has regular contours and a semisolid-cystic nature radiologically despite the fact that they are.

**Keywords:** Teratoma, Head and neck tumours, Oral cavity

#### Introduction

Teratomas are midline tumors of the pediatric age group. They are mostly located at gonadal or sacrococcygeal region and are diagnosed at young ages [1,2]. The incidence rate in adults is less than 1%. They are more common in females and two peaks have been reported in the second and third decades [3]. The locations of teratomas incidences in a decreasing order of incidence are the ovaries, the testes, the anterior mediastinum, the retroperitoneum, the presacral and coccygeal regions, the intracranial region and the neck [4]. This article will present the clinical and radiological findings and surgical treatment results of a patient with a localized mature cystic teratoma (MCT) in the sublingual area

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#### **Case Report**

The 23-year-old female patient presented with a swelling under the tongue that had been present for nearly a year. The physical examination revealed a mass with an approximate size of 4x3 cm located in the sublingual area that was palpable in the submental area and displaced the tongue superiorly and a had regular surface (Figure 1).



**Figure 1** The preoperative appearance of the mass.

The ultrasonographic examination revealed a 40x31 mm sized, hypoechoic/rich content mass containing a 12x11 mm round lesion with hyperechoic surroundings. At magnetic resonance imaging a 40x33x30 mm semisolid-cystic mass was observed on floor of the mouth displacing the tongue superiorly. It was hyperintense in T2 weighted images and had regular borders. A separate nodular component in the central area of the lesion with an 8 mm diameter was also observed. The lesion had narrowed the oropharyngeal air column (Figure 2).



**Figure 2** The appearance of the mass in the coronal contrasted T1 weighted and axial T2 weighted images.

The results of the routine laboratory analysis of the case in our clinic were normal. Surgical excision was planned. The mass was totally excised under general anesthesia with an intraoral sublingual mid-line incision (Figure 3, 4).



Figure 3 Intraoperative appearance a) the appearance of the mass from the sublingual mid-line incision b) the excision of the mass.



**Figure 4** Postoperative pathology specimen.

Histopathological examination revealed that the mass was a mature cystic teratoma with hairy sebaceous material in the lumen (Figure 5). No complications developed in the postoperative period or the one-year follow-up period of the patient and no additional treatment was planned.



Figure 5 The cyst wall consists of skin and skin adnexal structures (H&Ex200).

#### Discussion

Teratomas are tumors of embryonic origin that comprise components of the three germ layers (endoderm,

mesoderm and ectoderm) in various ratios and are rarely located in extragonadal areas. The mediastinum, neck and retroperitoneal areas have been reported in literature as extragonadal locations [2]. In our case, the mass confirmed as a teratoma by pathological analysis was located in a more uncommon area, the sublingual area. Neck teratomas have been rarely reported in literature. Teratomas are childhood tumors and are diagnosed during the early years of life [3,5,6]. The case presented was a 23-year-old female. Cartilaginous, fatty, bony, muscular and neural elements may be grossly visible in histopathological examination [7]. Hairy sebaceous material was observed in the macroscopic examination of the excised material. Teratomas appear as heterogeneous mass with internal calcification in ultrasonography [8]. The ultrasound findings of the case presented are consistent with these findings.

The complications of MCT are torsion (16%), rupture (1-2%) and infections. Malign transformation occurs in 0.2-2 % of MCTs and is very rare [9,10]. The golden standard of MCT treatment is surgical excision. It has been reported that the prognosis is favorable in patients treated with total surgical excision [2]. Our case was treated with total surgical excision and no findings suggestive of relapse or late complications were observed during the one-year follow-up.

In conclusion, we believe that teratoid tumors should also be considered in the differential diagnosis of neck lesions especially if the mass has regular contours and a semisolid-cystic nature radiologically despite the fact that they are.

#### References

- 1. Gonzalez M, et al. Asymptomatic intrapericardial mature teratoma. Ann Thorac Surg. 2010;89: e46-e47.
- 2. Otani M, Tsujimoto S, Miura M. Intrarenal mature cystic teratoma associated with renal dysplasia: case report and literature review. Pathol Int. 2001;51:560–4.
- 3. Wang L, Chu S, Ng K, Wong Y. Adenocarcinomas arising from primary retroperitoneal mature teratomas: CT and MR imaging. Eur Radiol. 2002;12:1546–9.
- 4. Gschwend J, et al. Retroperitoneal teratoma presenting as an abdominal–pelvic mass.Obstet Gynecol.1987;70:500–2.
- 5. Alimehmeti M, et al. Cystic benign teratoma of the neck in adult. World J Clin Cases. 2013;1(6):202-4.
- 6. Abe H, et al. Benign cervical teratoma in an adult: report of a case. Surg Today. 1997; 27: 469-72.
- 7. Pinson CW, ReMine SG, Fletcher WS, Braasch JW. Long-term results with primary retroperitoneal tumors. Arch Surg. 1989 Oct;124(10):1168-73.
- 8. Wang PC, Yang TL, Pan HB. CT images of a malignant-transformed ovarian mature cystic teratoma with rupture: a case report. Korean J Radiol. 2008;9(5):458–61.
- 9. Grebenc ML, et al. Primary cardiac and pericardial neoplasm: radiologic-pathologic correlation. Radiographics. 2000;20:1073–103.
- 10. Park JH, et al. An ovarian mucinous cystadenocarcinoma arising from mature cystic teratoma with paraaortic lymph node metastasis: a case report. J Gynecol Oncol. 2008;19(4):275–8.

#### **Information About Previous Presentations**

36th Turkish National Congress of Otorhinolaryngology and Head & Neck Surgery (November 5-9, 2014, Antalya, Turkey).