

## ■ Case Report

## Giant buccal lipoma resected through transoral approach

### *Transoral yaklaşımla rezekte edilen dev bukkal lipom*

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#### ABSTRACT

Lipomas are the most common benign soft tissue tumors, but they are rarely seen in the oral cavity comprising no more than 1 to 5% of all neoplasms. In the oral region, they are observed mostly in salivary glands, buccal region, floor of the mouth, tongue and lips which are generally well-defined, mobile, painless, slowly growing solitary or lobulated lesions. Lipomas in the buccal region and in the oral cavity may cause chewing, speech, and cosmetic problems. In most of the patients, they are diagnosed in early stages and rarely reach very big dimensions. Treatment of lipoma is performed via surgical excision by cutaneous or intraoral approach. Here with, we report a case of giant lipoma which was resected through transoral route.

**Key words:** Soft tissue neoplasm, buccal mucosa, lipoma, oral surgical procedures

#### ÖZET

Lipomlar en sık görülen benign yumuşak doku tümörler olmasına rağmen oral bölgede nadir görülür. Bu bölgedeki tüm neoplaziler arasındaki oran yaklaşık 1-5% kadardır. Oral bölgede en sık tükrük bezleri, bukkal bölge, ağız tabanı, dil ve dudaklarda izlenir. Genellikle yavaş ve ağrısız büyüyen, iyi sınırlı, mobil, tek veya lobüle lezyonlardır. Bukkal bölgedeki ve oral kavitedeki lipomlar çiğneme, konuşma fonksiyonlarında güçlük ve dış görünüm sorunlarına yol açtıklarından dolayı fazla büyümeden teşhis edilirler. Çok büyük boyutlara ulaşması nadirdir. Tedavisi intraoral veya kutanöz yaklaşımla cerrahi eksizyondur. Biz bu yayında bukkal bölgedeki oldukça büyük boyutlara ulaşmış ve intraoral yolla tedavi ettiğimiz bir lipom vakasını literatür ışığında sunmayı amaçladık.

**Anahtar kelimeler:** Yumuşak doku tümörü, bukkal mukoza, lipom, oral cerrahi prosedürler

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Received 06.12.2014, accepted 20.03.2015

doi: 10.18663/tjcl.48194

## Introduction

Lipomas are slowly progressing benign neoplasms of mature fat cells and the most frequent seen soft tissue tumors. About 10-15% of them found in head and neck region and only 1-4% are located within the oral cavity. Although various theories have been suggested to explain etiology, none of them clearly explained the exact reason. The incidence increases at the 5th-6th decades. They have been reported in various localizations including salivary glands, buccal mucosa, gingiva, floor of the mouth, tongue, and lips [1-5]. These lesions are covered by mucosa and yellowish in color. Oral lipoma (OL) can cause speaking and chewing difficulties, impairment of salivary flow and also cosmetic problems [6]. Treatment is total excision of the mass together with its capsule. Here, we report a case of buccal lipoma which was giant and totally excised through intraoral route.

## Case Report

A 35-year-old woman admitted to Otolaryngology Department of Erzurum Training and Research Hospital with the complaints of swelling of the right cheek and consequently speaking and chewing difficulties. Patient history revealed that the mass have been growing for 2 years without pain. And also she had not any trauma or systemic disease history. Clinical examination revealed a stiff, mobile mass 6x5 cm in diameters extending to masseter muscle and zygomatic bone (Fig. 1).



**Figure 1.** Patient with a mass on the right side of her face

The fine needle biopsy result taken by external center was reported as 'lipoma' and MR imaging demonstrated a hyperintense (in T1-weighted sequences) mass consistent with lipomatous lesion (in T2-weighted sequences) extending to the masseter muscle posteriorly. After obtaining informed consent of the patient, operation was planned. Under nasotracheal general anesthesia, intraoral route was opened by a right upper gingivobuccal sulcus incision. The mass was exposed after elevating the mucosal tissues (Fig. 2).



**Figure 2.** Intraoral view of the mass following right upper gingivobuccal sulcus incision.

A 6x5x4 cm yellowish soft mass was dissected through its capsule by blunt dissection protecting the buccal branch of facial nerve and stenson duct. (Fig. 3)



**Figure 3.** The excised Lipoma measuring 6x5x4 cm

Operation site was closed primarily by absorbable suture. There was no postoperative complication. On pathologic examination, the mass was diagnosed as lipoma. During 1 year under control period, there is no recurrence of symptoms and lesions (Fig. 4).



**Figure 4.** Postoperative view of the patient

Written approval were taken from the patient to use all the data and photos for scientific purposes.

## Discussion

Benign lipomas are the most common mesenchymal tumors developing in any location where fat is normally present, but are relatively uncommon in the oral and maxillofacial region. There are very rare case reports in literature reporting lipomas located in buccal region. The most common localizations of lipomas in the oral region are parotid area, buccal region, lips, submandibular region, tongue, palate, and mouth floor [1-3]. Their occurrence rate among the all benign lesions varies approximately 1% to 5%. OL mostly occur in the 5th and 6th decades. Males are slightly more affected than females [1-3,5-7]. Trauma, infection and metabolic reasons have been considered in etiology but the exact mechanism remains to be elucidated [6]. From histological point of view, they may be classified as spindle cell lipoma, fibrolipoma, intramuscular and infiltrative lipomas, angioliipoma, pleomorphic lipoma, myxoid lipoma and atypical lipoma.

Differential diagnosis includes other masses of cheek such as liposarcoma, hemangioma, arteriovenous malformation, nodular fasciitis, buccal fat pad herniation, fibroma, and dermoid cyst [4,8,9]. Preoperative ultrasonography (USG) and magnetic resonance imaging may be used for preliminary diagnosis, localization and dimension of the mass. A previous study showed that magnetic resonance imaging was found to be 100% sensitive and 83% specific in distinguishing between lipoma and liposarcoma. It was 100% specific in diagnosing lipoma [8,10].

There are lots of studies presented that OL have slow progression and they usually are diagnosed at 2-2.5 cm in size [1,3,5]. Intraoral lipomas may lead to symptoms such as difficulty in chewing and speaking, besides facial asymmetry. When they are very big, they may lead to complications resulting from dentofacial deformity and also stasis of salivary flow [6].

Treatment of buccal lipoma is surgery and postoperative recurrence is rare [11-13]. Surgical approach depends on the size and settlement of the tumor. Buccal lipomas may be excised by intraoral approach with high buccal sulcus incision [14]. Radical interventions may be required for excessive, recurrent masses or liposarcomas extending to deeper regions. Such cases should be operated by cutaneous approach which permits wide surgical view, but may lead cosmetic problems [14,15]. The key maneuver during surgery is protection of parotid gland duct and buccal branch of fascial nerve [8]. In our case, lipoma was very big in dimensions and led to functional and cosmetic problems. We made an intraoral upper gingivobuccal sulcus incision and totally excised the mass without complication. During 1-year follow-up we observed no recurrence.

As a conclusion intraoral lipoma is a rare entity which can result in aesthetics and functional concerns. Clinicians should use latest diagnostic methods and conservatively treat them without causing much discomfort. We suggest that intraoral approach may provide cosmetic benefits and may be preferred in lipomas of buccal region.

## Declaration of conflicting interests

The authors declared no conflicts of interest with respect to the authorship and/or publication of this article.

## Funding

The authors received no financial support for the research and/or authorship of this article.

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