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Giant Mucus Retention Cyst of the Buccal Space

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Summary

Aim: Mucoceles, especially the extravasation type mucoceles, are very common in lower lip. Retention type of mucoceles and buccal localizations are infrequent. We aimed to present an unusual sized mucocele of buccal space and discuss surgical procedure of mucoceles.

Case Report: 7 cm sized buccal mucus retention cyst in 42-year-old woman was admitted to our clinic. After examination and diagnose were done, complete excision of mucocele was performed together with a left superficial parotidectomy. The facial nerve was seen intraoperatively and secured by dissection from the mass.

Conclusion: It is reliable to approach buccal space's masses with a superficial parotidectomy.

Key Words: Oral mucoceles, mucus retention cyst, mucocele surgery

Bukkal Boşluğun Dev Mukoseli

Özet

Amaç: Mukoseller özellikle ekstravazasyon mukoselleri alt dudakta oldukça sık olarak görülmektedir. Mukosellerin bir alt tipi olan retansiyon mukoselleri ve bunların bukkal yerleşimleri oldukça nadir görülmektedir. Çalışmamızda nadir görülen büyüklükte bir bukkal bölge mukoselini sunduk ve mukosellere yönelik cerrahi yaklaşımı tartışmayı amaçladık.

Olgu Sunumu: Bukkal bölgede 7 cm çapında mukus retansiyon kisti bulunan 42 yaşında bayan hasta kliniğimize başvurdu. Hastanın muayenesi ve tanı konulması sonrası, mukosel süperfisiyal parotidektomiyle birlikte komplet şekilde eksize edildi. İntraoperatif olarak fasiyal sinir görüldü ve kitleden diseke edilerek korundu.

Sonuç: Bukkal kitlelere süperfisyal parotidektomi yapılarak yaklaşılması güvenli bir yoldur.

Anahtar Kelimeler: Oral mukosel, mukus retansiyon kisti, mukosel cerrahisi

INTRODUCTION

Mucus retention cyst is a mucocele caused by a glandular duct obstruction and resulting in an accumulation of mucus in its cavity. Other type of mucocele is known as the extravasation cyst which is the most common type of mucocele and resulting from salivary gland duct rupture and spillage of mucin into surrounding soft tissues. Also ranula is a form of mucocele that occurs exclusively on the floor of the mouth. (1,2) Mucoceles are most commonly found on the lower labial mucosa. Less common sites are the buccal mucosa, tongue, floor of the mouth and the soft palate (1,3). A case of giant buccal mucus retention cyst was described and the terminology and surgical procedure were discussed.

CASE REPORT

A 42-year-old woman was admitted to department of ORL due to the appearance of a swelling in the left cheek with 3-month history (Figure 1).

Figure 1. Soft swelling in the cheek

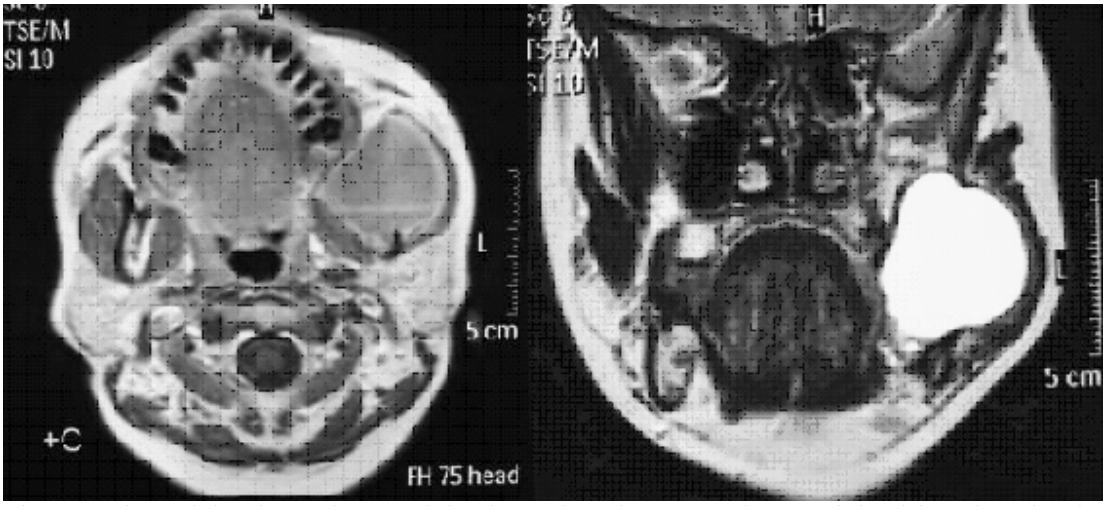

Figure 2a,b. Axial enhanced T1 weighted MR imaging (a) and T2 weighted imaging (b) show cystic mass with fluid-fluid level and wall enhancement in buccal space. The neighboring masseter muscle was pushed and mandible was destructed by the cyst.

She had a pain during chewing and speaking. She had no facial palsy, xerostomia, fever or any other systemic disease. Magnetic resonance (MR) imaging examination was done 1 month ago. There was 7 cm cystic mass which pushed neighboring masseter muscle and destructed mandible in buccal space. The cystic mass had fluid-fluid level and enhanced smooth wall (Figure 2).

Fine needle aspiration was done and biochemical study showed high level of amylase in aspiration material. Complete excision of 7x5x4 cm mass was performed together with a left superficial parotidectomy. The modified Blair (lazy S) incision was used for surgical procedure. The parotid gland was pushed posteriorly by the cyst but there was no connection between them. At the inferior margin, because of the mandibular destruction of cyst, the mandible was very thin. Pes anserinus was defined, marginal and buccal branches of the facial nerve were dissected from cyst (Figure 3). Histological diagnosis was mucus retention cyst (Figure 4). The patient had no facial weakness and other complications or recurrence at 1 year follow up.

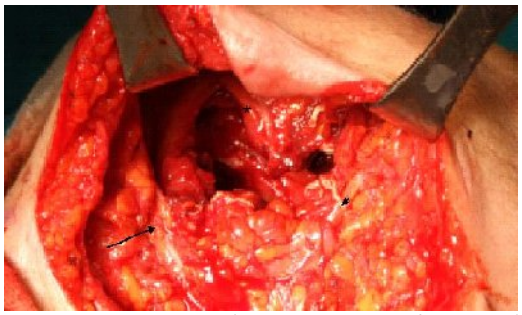

Figure 3. Intraoperative appearance of ruptured cyst (*). Buccal (arrowhead) and mandibular (arrow) branches of the facial nerve were dissected from giant cyst.

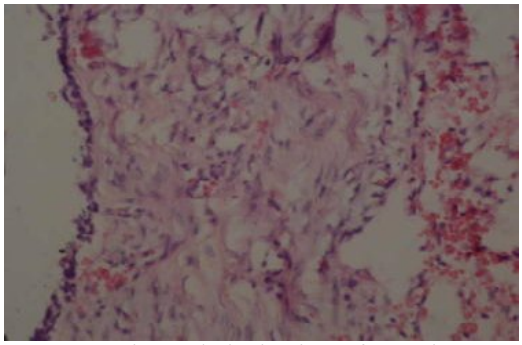

Figure 4. Histopathologic view of retention cyst. Mucous material lined by epithelial capsule.

DISCUSSION

Most authors describe the term mucocele as a cystic space filled with mucinous material. They accept two main types of mucocele; retention type and extravasation type. However some authors use the term mucocele only for extravasation type (3).These authors believe that mucocele is not a real cyst because it lacks an epithelial lining.

Mucoceles of minor salivary glands are very common. Most of these lesions are extravasation type. Nico et all found only one retention cyst (2.7%) among the 36 pediatric patients with oral mucocele (4). Bagan Sebastian et all reported that 5% of 25 cases with oral mucus cysts result from retention (5). Common site for oral mucoceles is lower lip. Other sites are less common. Size of mucoceles varies from 1 mm to several centimeters in size (3,5). Began Sebastian et all found most of mucoceles sizes were between 10 mm and 13 mm. This case represents the first report of such a big retention cyst in buccal space.

In 1988 Rodgers and Myers pointed that there is an ever-present danger of injury to the facial nerve and Stensen's duct as a result of intraoral surgery of the masses which localized in buccal space (6). But especially some of the dental surgeons still prefer intraoral extraction of masses in the buccal space (7,8). Superficial and minor mucoceles can be removed by intraoral surgery, but it is dangerous to remove bigger mucoceles or masses which placed in lateral or medial part of buccal space by this approach. Masseter, zygomaticus and orbicularis oris muscles should be accepted as an anatomical land marks to choose the approach for surgery. Rhytidectomy approach (9) and extended parotid-submandibular (6) approach are recommended for masses in buccal space. In our case superficial parathyroidectomy was also done for visualization of the cyst margins and protection of facial nerve branches and parotid duct.

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