

Sialolipoma of Hard Palate: A Case Report with an Emphasis on its Cytopathological Features

Sert Damakta Sialolipom: Sitopatolojik Özelliklerine Vurgu Yapılan Bir Olgu Sunumu

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ABSTRACT

Sialolipoma, an uncommon variant of lipoma is histologically characterized by benign mature adipocytes with entrapment of salivary glandular tissue. Sialolipomas have been reported in both major and minor salivary glands. An exhaustive review of literature revealed less than 12 cases of sialolipoma affecting the palate have been reported to date. Histopathological features of sialolipomas have been described in detail in the literature; however, the cytopathological features of minor salivary gland sialolipomas have not been discussed. The following report is a case of a sialolipoma that presented as a painless swelling of palate in a 48 year old male. The patient reported no other concerns. A provisional diagnosis of pleomorphic adenoma was given on the basis of clinical and radiological feature; however the final diagnosis of sialolipoma was rendered with the correlation of cytopathological and histopathological features. A surgical excision of the lesion was carried out under general anesthesia and the 6 months post operative follow up of the patient was uneventful. The histopathological examination revealed normal benign minor salivary gland tissue entrapped in sheets of mature adipocytes along with areas of oncocyctic changes.

Keywords: Sialolipoma, palate, minorsalivaryglands, lipoma

ÖZ

Sialolipom, lipomun nadir bir çeşididir ve histolojik olarak tükürük bezi dokusunun hapsoldüğü iyi huylu olgun yağ hücreleri ile karakterizedir. Sialolipomlar hem majör hem de minör tükürük bezlerinde bildirilmiştir. Literatürün kapsamlı bir incelemesi, bugüne kadar damağı etkileyen 12'den az sialolipom vakasının bildirildiğini ortaya koymuştur. Sialolipomların histopatolojik özellikleri literatürde ayrıntılı olarak tanımlanmıştır; ancak minör tükürük bezi sialolipomlarının sitopatolojik özellikleri tartışılmamıştır. Aşağıdaki rapor, 48 yaşında bir erkek hastada ağrısız damak şişliği olarak görülen bir sialolipom vakasıdır. Hasta başka bir şikayet bildirmemiştir. Klinik ve radyolojik özelliklere dayanarak pleomorfik adenom ön tanısı konmuştur; ancak sitopatolojik ve histopatolojik özelliklerin korelasyonu ile sialolipom kesin tanısı konulmuştur. Lezyonun cerrahi eksizyonu genel anestezi altında gerçekleştirildi ve hastanın ameliyat sonrası 6 aylık takibi sorunsuz geçti. Histopatolojik incelemede, olgun yağ hücreleri arasında sıkışmış normal iyi huylu minör tükürük bezi dokusu ve onkositik değişiklik alanları gözlemlendi.

Anahtar Kelimeler: Sialolipom, damak, minör tükürük bezleri, lipom

INTRODUCTION

Lipoma is a benign, slow-growing, asymptomatic, mesenchymal neoplasm that chiefly occurs in the upper back and neck. Occurrence of lipomas in the oral cavity is relatively rare ¹Various benign histological variants of lipoma have been reported in the literature based on the type of tissue present along with the mature adipocytes; Fibrolipoma, angioliipoma, chondrolipoma, osteoliipoma, myxoliipoma, myoliipoma and spindle cell lipoma (SCL).²Intra-orally lipomas are most commonly seen in buccal mucosa (due to the presence of abundant fat tissue) palate is the least common site for lipoma because of the presence of less fatty tissue.^{3,4}

Sialolipoma is a relatively newer histological variant of lipoma first described by Nagao et al.⁵ in 2001, as a benign encapsulated mass made of sheets of mature fat cells with scattered foci of non – neoplastic salivary gland tissue, entrapped epithelial islands with occasional metaplastic oncocyctic changes. An exhaustive review of Medical literature could reveal only 19 cases of sialolipomas inside the oral cavity and 9 cases affecting the hard palate.^{3,6,7} Sialolipomas occur more frequently in females than males and affects both major and minor salivary glands. Most of the cases of minor salivary glands sialolipomas have been reported in adults.

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Although the histopathological features of sialolipoma have been reported thoroughly in the literature, there is a paucity of information regarding their cytopathological features; hence the present report is aimed at describing the cytopathological and histopathological features of oral sialolipoma.

CASE PRESENTATION

The flowchart of this study is illustrated in Figure 1. These specimens A 48-year-old man presented to a dental clinic for evaluation of a fluctuant, soft tissue mass, painless mass on the upper left back region of the jaw for the last 8 months. The family history and past medical history were non-contributory to the present growth. Intraoral examination revealed a soft tissue growth on the left posterolateral part of the palate, measuring about 3×3 (cm) in dimension (Figure 1). The color of the mucosa was found to be similar to the color of adjacent mucosa without any ulceration and discharge. An intra-oral periapical radiograph was taken that showed that the growth was not related to the teeth and no bone loss was noted. A provisional diagnosis of pleomorphic adenoma was given with the differential diagnosis of Adenoid cystic carcinoma ACC). Subsequently, the patient was referred for a Fine Needle Aspiration (FNA) procedure.

The procedure was performed by using a 22 gauge needle attached to a 10cc disposable syringe. A mucoid material was taken from the growth. May-Grunwald Giemsa stain was used for staining the smear. Microscopic evaluation of the smear revealed a collection of mature adipocytes (Figure 2) with scattered oncocytes (Figure3). The cytopathological features excluded the possibility of ACC.



Figure 1. Soft tissue growth on the left posterolateral aspect of the palate

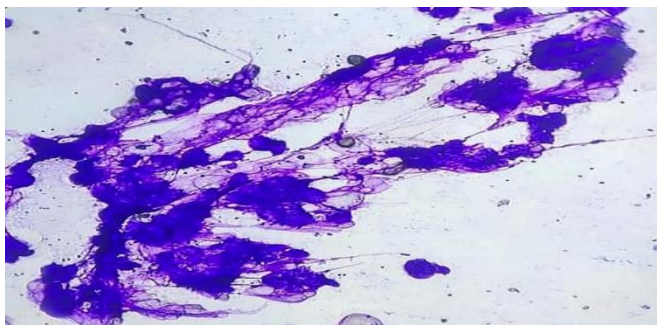


Figure 2. Smear shows a collection of mature fat cells (May-Grunwald Giemsa stain X10)

Surgical excision of the lesion was done in a sterile condition under general anesthesia and the excised mass was sent for histopathological examination. The hematoxylin and eosin-stained soft tissue section revealed normal benign salivary gland tissue is entrapped in the sheet of benign and mature adipocyte in a fibrocellular connective tissue stroma (Figure 4) with areas of oncocytic metaplasia. An area of hemorrhage was noted with a collection of numerous extravasated RBCs. The connective tissue stroma was fibrous.

Based on histopathological features, a final diagnosis of Sialolipoma was rendered. The post-operative follow-up of the patient was uneventful. The patient's consent was obtained by consent form.

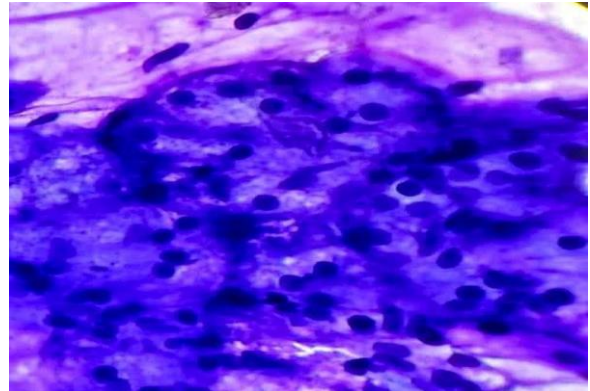


Figure 3. Collection of mature adipocytes with monocytes (May-Grunwald Giemsa stain X 45)

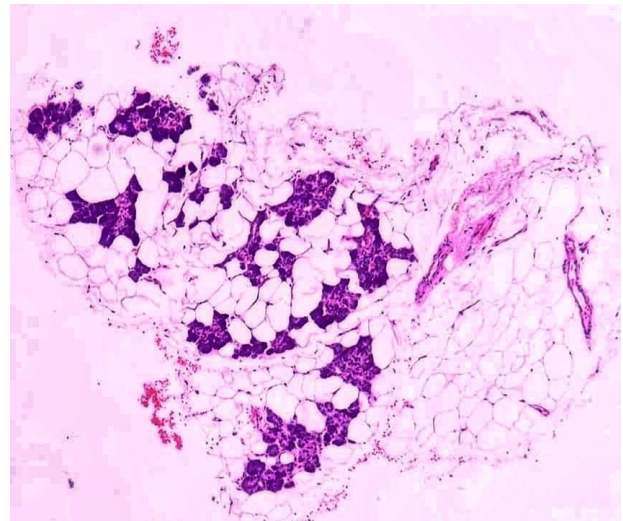


Figure 4. Low power view shows normal minor salivary gland tissue entrapped within the fat cells. (Hematoxylin and Eosin stain X10)

DISCUSSION

The term sialolipoma was proposed by Nagao et al.⁵ in 2011 as a benign lipomatous tumor occurring in salivary glands. Both major and minor salivary glands are found to be associated with sialolipoma. The most common site for sialolipoma was reported as the parotid gland. In the oral cavity sialolipoma is extremely rare with just 18 cases have been reported in the English language literature.⁶ The palate is an unusual site

for lipomas i.e. it is comprised of minimum fat tissue in the oral cavity. 9 cases of palatal sialolipomas have been reported in the literature,

present case is preferably the 10th case of palatal sialolipoma. The clinical features of sialolipomas are similar to the conventional lipomas of the body. They are usually painless and slow-growing.⁹ There is no significant data to mark the sexual predilection of palatal sialolipomas however the literature revealed that 5 cases were males and 4 were females.⁸ Minor salivary gland sialolipomas tend to be smaller than the major salivary gland sialolipomas.^{6,7} The etiology of sialolipoma is unclear, however it is believed that it is a histopathological variant of conventional lipoma in which the salivary gland component is entrapped.⁹ Histopathological features of sialolipoma have been well described in the literature includes sheets of mature adipocytes with glandular tissue, periductal fibrosis, and oncocyctic metaplasia with mild to moderate infiltration of lymphocytes.⁴ Very little description of cytopathological features of sialolipomas has been found in the literature.

Cytopathology can be a reliable and quick method to differentiate palatal sialolipoma from a malignant salivary gland tumor i.e. Adenoid cystic carcinoma (ACC). In the present case, the differential diagnosis was Adenoid cystic carcinoma, but the finding of adipocytes and oncocytes excluded the possibility of ACC; this also minimized the risk of aggressive treatment modality to be opted in a malignant tumor. The treatment of choice is complete surgical excision, and none of the cases recurred.^{2,3,5,8}

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