

Myofibroma of the Cheek: Case Report

Yanakta Görülen Miyofibroma

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ABSTRACT Myofibroma is a rare spindle cell neoplasm that consists of myofibroblasts. Most of them occur as solitary lesions, multicentric tumors are known as myofibromatosis. Myofibroma is commonly found in the dermis and subcutaneous tissues of the head and neck. It is a usually slow growing painless soft tissue swelling with intact surrounding mucosa that is rarely ulcerated. The most frequent oral location is the mandible followed by the lip, buccal mucosa and tongue. The diagnosis of myofibroma should be established with both clinical and radiological using appropriate imaging techniques such as computed tomography, magnetic resonance imaging, panoramic radiography and ultrasonographic examination. Definitive diagnosis is made by histological examination. This report describes a case of a 35 year-old male who presented with a solitary myofibroma in the left cheek region with the ultrasound image.

Key Words: Myofibroma; cheek; soft tissue neoplasms

ÖZET Miyofibroma; miyofibroblastlardan oluşan nadir görülen iğsi hücreli bir neoplazmdir. Sıklıkla tek olarak oluşurlar, birkaç odaklı olanlar miyofibromatozis olarak bilinirler. Miyofibroma, baş boyun bölgesinin subkütanöz dokuları ve dermis tabakasında yaygın olarak bulunur. Miyofibroma genellikle yavaş büyüyen, ağrısız, yumuşak doku şişliği ile karakterizedir ve üzerlerindeki mukoza sıklıkla sağlıklı olarak görünür, nadiren ülserasyon izlenir. Lezyonlar ağız içinde daha çok mandibulada görülürler, daha sonra sırası ile dudakları, bukkal mukozayı ve dili tutarlar. Miyofibromanın teşhisinde klinik muayene ve bilgisayarlı tomografi, magnetik rezonans görüntüleme, panoramik radyografi, ultrasonografi gibi yöntemlerle radyolojik muayenenin birlikte yapılması gereklidir. Kesin teşhis histolojik inceleme ile yapılır. Bu çalışmada, 35 yaşındaki erkek hastada sol yanak bölgesinde bulunan soliter miyofibroma olgusu ultrasonografik görüntüsü ile birlikte sunulmaktadır.

Anahtar Kelimeler: Miyofibrom; yanak; yumuşak doku tümörleri

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Myofibroma is an uncommon spindle cell neoplasm that consists of myofibroblasts. The disease is classified into myofibroma for solitary lesions and myofibromatosis for multicentric lesions. Solitary lesions are more common than multiple ones with a predilection for the head and neck region. The most frequent oral location is the mandible followed by the buccal mucosa and tongue.¹ The lesion can appear at any age but they occur mainly in children with a slight predilection for male.² The diagnosis of myofibroma can be reached by a histopathologic and im-

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munohistochemical analysis.³ This report describes a solitary myofibroma affecting left cheek in a 35 year-old male.

CASE REPORT

A 35 year-old male was referred to our clinic with a complaint of painless swelling in his left cheek. His medical and family history was unremarkable. The patient had no history of trauma and described the swelling without noticeable change in size for about 8 years. Clinical examination revealed a solid mobile mass in his left cheek (Figure 1a, b).

Ultrasound (US) examination, revealed a well-defined ovoid mass with a diameter of 30x16 mm

under the skin. The lesion had a firm capsule with heterogeneous echo. The parankima of the lesion showed hyper and hypoechoic features. Prominent vascularity was observed from peripheral to the center of the lesion (Figure 2a, b).

The lesion was removed surgically via an intraoral approach under local anesthesia and the surgical specimen was sent for histopathologic examination (Figure 3a, b). During excision of the lesion a peripheral branch of the facial artery was dissected and cauterized.

In histopathological evaluation, the lesion was surrounded by collagen bundles showing hyaline sclerotic changes. The parankima of the lesion

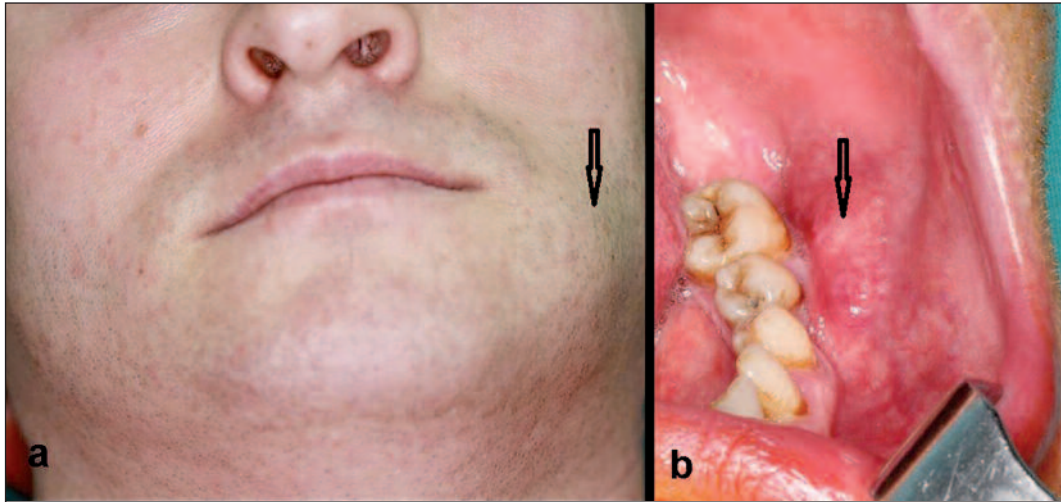


FIGURE 1a, b: Clinical presentation of myofibroma. Submucosal mass was observed in the left cheek.

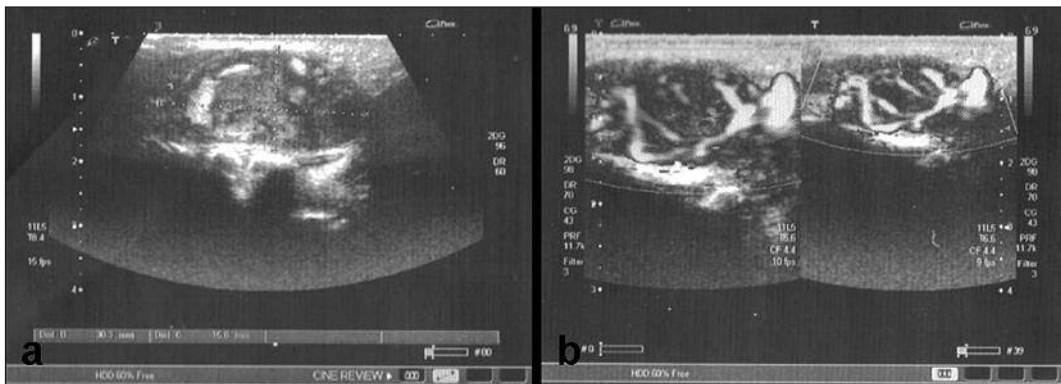


FIGURE 2a, b: Ultrasound image of myofibroma. (a) a well-defined ovoid solid mass and (b) vascularity from the peripheral to the center of the lesion were observed.

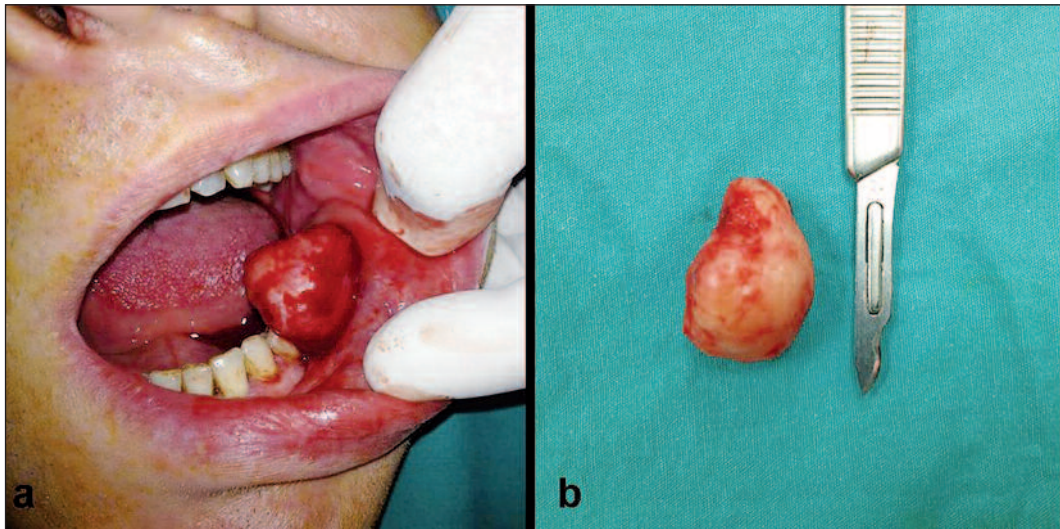


FIGURE 3a, b: (a) Intraoperative and (b) macroscopic appearance of myofibroma in the left cheek region.

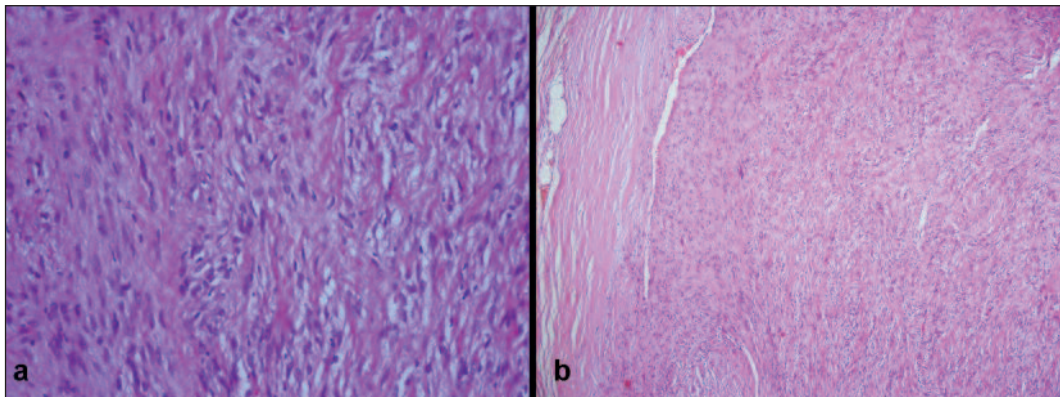


FIGURE 4a, b: The histopathologic appearance of the myofibroma. (a) Well-defined mesenchymal tumor surrounded by a capsule comprised of fibrotic connective tissue (HEX100) (b) the tumor is composed of fibroblast/myofibroblast cells with spindle-ovoid shaped nuclei. There is no sign of atypia. Thinner collagen fibers were observed between tumor cells (HEX400).

showed spindle cells with eosinophilic cytoplasm which has been observed as loose bundles without any sign of atypia and increased mitotic activity. A decreased number of inflammatory cells were also identified (Figure 4a, b). The diagnosis of the lesion was myofibroma. The patient has been followed-up for 9 months and there were no postoperative symptoms or sign of recurrence.

DISCUSSION

Myofibromas are benign myofibroblastic lesions which mostly found as a solitary lesion. They have been usually slow-growing painless soft tissue

swellings with intact surrounding mucosa that are rarely ulcerated.^{1,4} The lesion sometimes shows rapid enlargement and might be misinterpreted as a malignant or aggressive lesion.^{1,5} In the present case the lesion has presented for about 8 years without noticeable enlargement and pain was not observed.

According to the clinical and radiographic criteria, Abramowicz et al. indicated two presentations of the solitary myofibroma.⁶ Exophytic myofibroma appeared as a soft tissue mass in the dentoalveolar region and intraosseous myofibroma that were associated with the mandible. Foss&Ellis⁵

evaluated 79 cases of myofibromas and myofibromatosis of the oral region and reported that one third of the tumors affected the bones of the jaws and all intraosseous tumors occurred in patients younger than age 18.⁵ In the present case the tumor involved the patients cheek region that the location was reported 14 of 79 in Foss&Ellis study.⁵

The myofibroma should be differentiated from other pathological conditions like leiomyoma, neurofibroma, fibrosarcoma, leiomyosarcoma, hemangiopericytoma and desmoplastic fibroma.⁴ Diagnosis of myofibroma should be established in order to avoid possible unnecessary treatment modalities as radiotherapy and extensive resections.

Routine radiologic imaging is frequently non-diagnostic for myofibromas. The diagnosis should be established with both clinical and radiological using appropriate imaging techniques such as computed tomography (CT), magnetic resonance imaging (MRI), panoramic radiography and ultrasonographic examination.^{4,7-10} Beck et al. typically characterized lesions as heterogeneous

masses with both multicystic and solid areas on CT.¹¹ MRI might have been useful for further evaluation of the extent and involvement of the lesion in adjacent tissues. Ultrasonographic evaluation was used for ruling out a vascular lesion.⁸ The final diagnosis can not be confirmed without histologic examination. In the present case ultrasonography which is easy to apply, cheap, noninvasive and radiation free was used. To our knowledge there are no published papers that have evaluated the myofibroma of the oral cavity using US.

Surgical excision is the treatment choice for myofibroma.^{1,4} In Abramowicz et al. study, most exophytic lesions were treated by marginal resection and all intraosseous myofibromas were treated by enucleation and curettage and no recurrence was reported.⁶ Foss&Ellis reported that six of 32 patients experienced recurrence and only solitary myofibromas recurred.⁵ After reexcision all were free of tumor an average of 42 months after their initial diagnosis. In the present case the lesion was removed surgically and there were no sign of recurrence for 9 months and patient has still been followed.

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