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Desmoplastic Fibroblastoma (Collegenous Fibroma) of the Hard Palate: Case Report

Sert Damağın Desmoplastik Fibroblastomu: Olgu Sunumu

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ABSTRACT

Desmoplastic fibroblastoma is an extremely rare, benign, slow growing lesion that mostly arises in the subcutaneous tissue or muscle. Only six cases identified in the oral cavity have been published in the literature. Here we present a new case of desmoplastic fibroblastoma in a 56-year-old man who presented with a mass in the hard palate with no history of previous trauma. Diagnosis of desmoplastic fibroblastoma was established according to histopathological and immunuhistochemical staining studies. No recurrence was seen over 1-year.

Keywords
Fibroma; desmoplastic; hard palate

ÖZET

Desmoplastik fibroblastom kas veya subkutan dokuda gelişen, yavaş büyüyen, benign oldukça nadir bir tümördür. Literatürde, oral kavitede geliştiği bildirilen altı vaka mevcuttur. Bu makalede, bilinen travma hikayesi olmayan, sert damakta kitle şikayeti ile başvuran 56 yaşındaki olguyu sunuyoruz. Histopatolojik ve immünohistokimyasal boyamayla desmoplastik fibrom tanısı konuldu. Bir yıllık izlem döneminde rekürrens görülmedi.

Anahtar Sözcükler
Fibrom; desmoplastik; sert damak

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INTRODUCTION

Desmoplastic fibroblastoma (DF), also known as collagenous fibroma, is a rare, benign, slow growing lesion affecting mainly the subcutaneous or muscle tissue. It was first described in 1995 by Evans in a report of seven cases.[1] DF has a male predilection with a peak incidence in the fifth and sixth decades of life. Patients usually present with a history of painless, slowly growing lesion. DF, has been reported in various locations, including the upper and lower extremities, posterior neck, upper back, abdominal wall and hip.[2] However, there are only six cases reported in the oral cavity.[3-8] Previously it has been found in the hard palate, in the alveolar bone, on the tongue and in the buccal mucosa. Here we present a new case of DF identified in the hard palate.

CASE REPORT

A 56-year-old man presented with a painless, slow growing mass localized in the left side of hard palate approximately for 1 year. Intraoral examination revealed a painless, well-circumscribed, firm lesion which is 5 cm in diameter and covered by normal mucosa (Figure 1). The patient reported no traumatic event or history of removable prosthesis usage. There was no palpable lymphadenopathy in the neck. His past medical history was otherwise unremarkable.

An excisional biopsy was performed under general anesthesia (Figure 2). At histopathological examination there was benign tumoral proliferation, which was seperated from the epithelium by a gray zone under the stratified squamous epithelium. The cells in the tumoral proliferation were spindle shaped, with eosinophilic cytoplasms and uncertain boundries embedded in a collagenous stroma. Neither cellular atypia nor mitosis were observed (Figure 3). Immunohistochemically, tumor cells showed diffuse and intense reactivity for vimentin (Figure 4). But the cells were immunonegative for α-smooth muscle actin. The diagnosis of DF is established. No recurrence was seen during one year follow-up period.

DISCUSSION

DF is a rare benign soft tissue tumor which presents as a firm, well circumscribed, painless mass with a

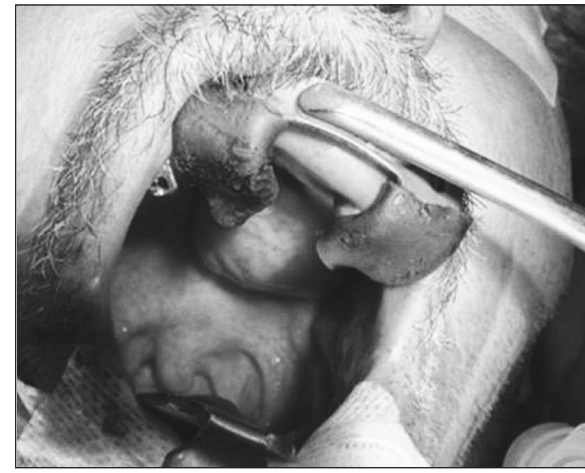

Figure 1. Intraoral view showing well-demarcated, solitary lesion covered by normal mucosa.

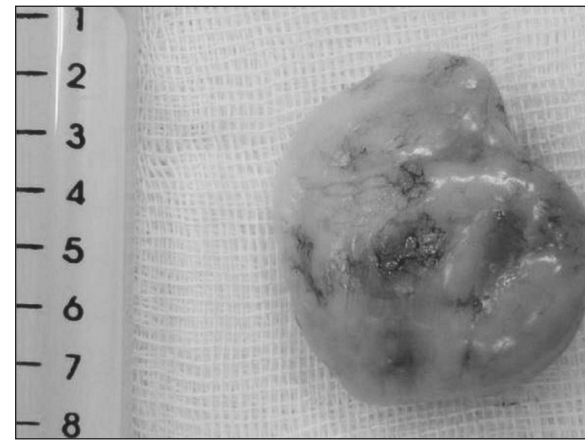

Figure 2. Surgical specimen measured to be 5-cm in diameter.

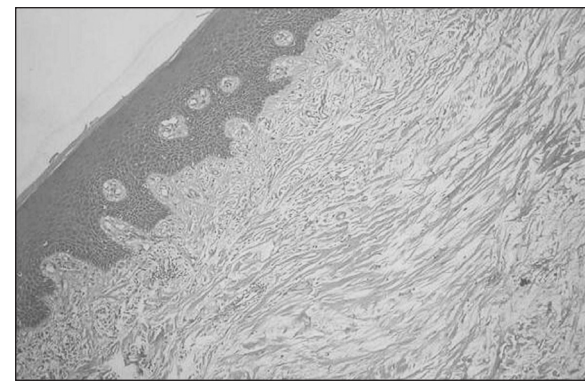

Figure 3. Histopathology of desmoplastic fibroblastoma. The cells in the tumoral proliferation have a spindle shape and eosinophilic cytoplasm with uncertain boundries embedded in a collagenous stroma (hematoxylin & eosin stain, x400).

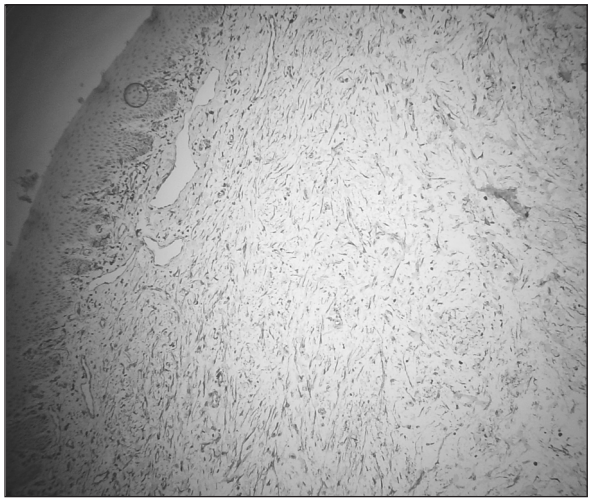

Figure 4. The cells in tumor showed diffuse and intense reactivity for vimentin (immunuhistochemical stain, x100).

history of long duration. It is commonly located in the subcutaneous tissue or skeletal muscle in adults with a male predilection. In the literature, tumor size ranges from 1 to 20 cm.[2] However, DF is rarely seen in the oral cavity therefore there are only six cases reported. Among these patients only one of them was male. These cases are as follows: three in the palate, one in the alveolar bone, one on the tongue, one in the buccal mucosa.[3-8] This report presents the seventh case of DF which was localized in the oral cavity.

Microscopically, DF is characterized by proliferation of spindle to stellate-shaped cells embedded in a collegenous stroma.[8] In immunohistochemical evaluation, the tumor cells are typically positive for vimentin and there is often focal reactivity for α-smooth muscle actin.[2]

The differential diagnosis of DF in the oral cavity should include a range of soft tissue lesions including inflammatory fibrous hyperplasia, traumatic fibroma and giant cell fibroma.[3,5] Traumatic fibroma is the most common tumor of the oral cavity, although in most cases, it represents a reactive hyperplasia of fibrous connective tissue in response to local irritation or trauma.[3] In our case no traumatic injury was reported by the patient.

The treatment of choice for DF is complete surgical excision. It has good prognosis, neither recurrences nor metastasis have been reported.[2-8] Although DF is extremely rare in the oral cavity it should be considered in the differential diagnosis of oral cavity masses.

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