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Soft Tissue Giant Cell Tumor of the Superior Lip: A Case Report

Üst Dudak Yerleşimli Yumuşak Doku Dev Hücreli Tümörü: Olgu Sunumu

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Öz

Düşük malign potansiyele sahip yumuşak doku dev hücreli tümörü (GCT-ST), genellikle ekstremite tutulumlu olsa da, nadiren baş ve boyun bölgesinde de bildirilmektedir. GCT-ST, işaretli atipi ve pleomorfizmin olmaması, net benign prognoz varlığı, histolojik ve immünohistokimyasal benzerlikleri sebebiyle kemikteki dev hücreli tümörün yumuşak doku muadili olarak kabul edilmektedir. Bu çalışmada, Burdur Devlet Hastanesi'ne başvuran 65 yaşındaki erkek hastanın üst dudağında ortaya çıkmış olan ağrısız soliter nodül olgusunun bildirilmesi ve baş ve boyun bölgesinde tutulum gösteren GCT-ST'lerle ilgili literatürün değerlendirilmesi amaçlanmıştır.

Anahtar Kelimeler: Dev hücreli tümör, yumuşak doku, dudak, baş, boyun, histopatoloji.

Abstract

Although soft tissue giant cell tumor (GCT-ST) of low malignant potential is usually located in the extremities, it is uncommonly reported in the head and neck region. It has been considered as the soft tissue counterpart of giant cell tumor of bone, because of their histological and immunohistochemical similarity and a clear entity of benign prognosis, lacking marked atypia and pleomorphism. In the present study it was aimed to report the case of a 65-year-old man who was admitted to Burdur State Hospital, complaining of a painless solitary nodule arising in the superior lip and to review the literature about GCT-STs involving the head and neck region.

Keywords: Giant cell tumor, soft tissue, lip, head, neck, histopathology.

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Introduction

Giant cell tumor of soft tissue (GCT-ST) is clinically and histopathologically indistinguishable from GCT of bone and it was first described by Salm and Sissons in 1972 (1). GCT-ST is predominantly a benign condition in both sexes, however its capacity to infrequently reappear or progress into a malignant lesion is well recognized. If surgically treated, it is expected to have a benign clinical course (1, 2).

GCT-ST usually involves trunk, thigh, and lower extremities yet uncommonly involves the lip (3). However, it is difficult to estimate the clinical course of GCT-ST cases. Due to very scanty data regarding benign GCT-ST cases of the lip, here we presented a case of GCT confined to the superior lip. Additionally, a brief review of the literature on GCT-ST, its treatment and the pathological features is presented. Here we present an otherwise healthy, 65 year-old Turkish male who originally presented a one-month swelling of his superior lip diagnosed with giant cell tumor.

Case Report

A 65-year-old man was referred to our outpatient clinic for the assessment of a painless mass in correspondence of superior lip. The patient reported that the lesion had occur and begun to grow for one month. The mass was superficially located in the superior lip and underwent an excisional biopsy. The excision specimen consisted of a mass with intact overlying mucosa, measuring 2.2 cm in its greatest dimension. Macroscopic examination revealed a solitary, pink-white mass. Laboratory work-up showed normal serum levels of calcium, phosphate and alkaline phosphatase.

On histologic examination, the tumor showed involvement of the soft tissue by coarse tumor nodule. Tumor nodule was composed of osteoclast-like multinucleated giant cells with abundant eosinophilic to amphophilic cytoplasm and multiple vesicular nuclei with chromatin clumping were observed. Osteoid and cartilaginous matrixes were not seen. Striking nuclear atypia, necrosis and atypical mitotic figures were not present in the lesion (Figure 1).

Immunohistochemically, the osteoclast-like giant cells showed positive immunoreactivity for CD68 (Figure 2) and negative for CD34 (Figure 3) and F13a (Figure 4) in the lesion. The pathologic interpretation of the biopsy results suggested the diagnosis of a GCT-ST of low malignant potential.

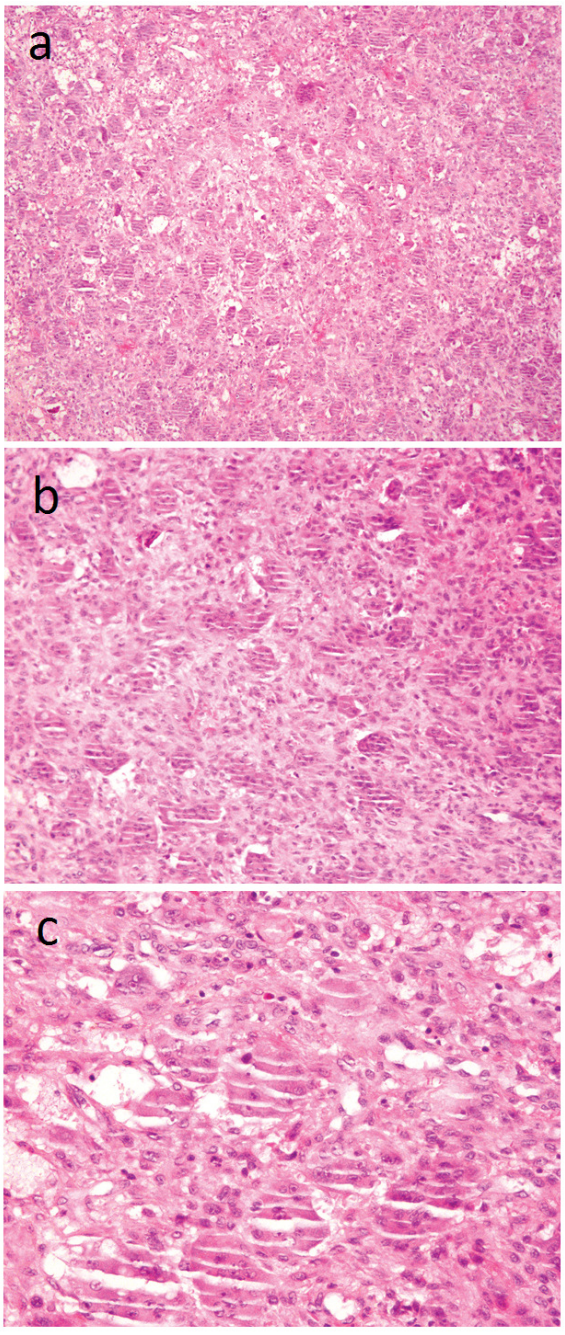

Figure 1 – Histologic image of lip giant cell tumor of soft tissue. Hematoxylin-eosin, (a) ob. 10×; (b) ob. 20×; (c) ob. 40×.

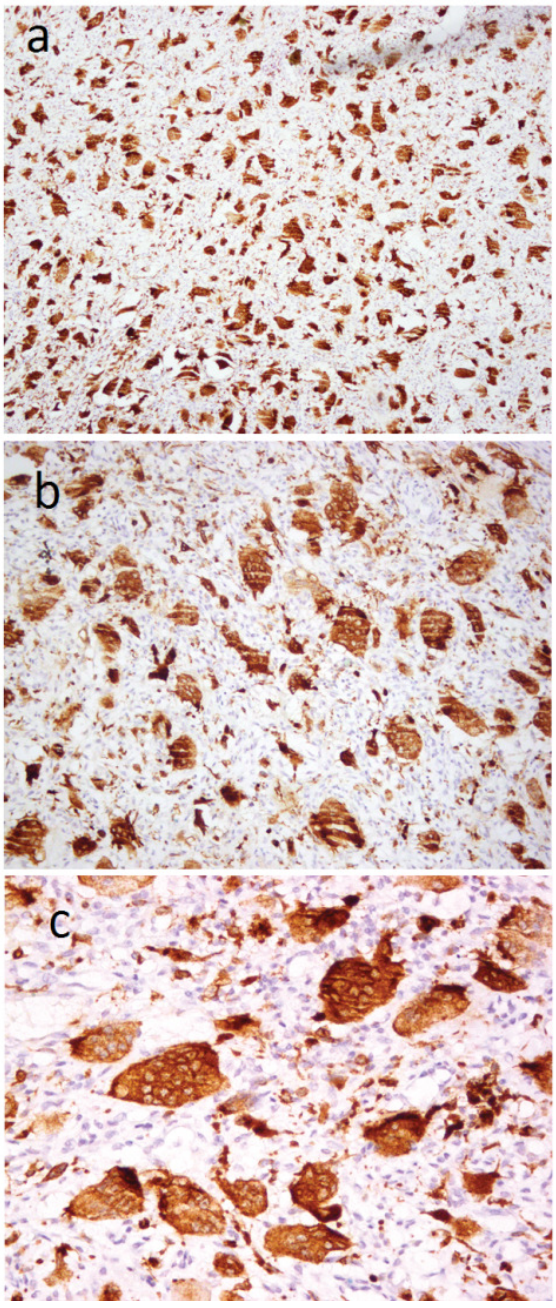

Figure 2 – CD68 immunohistochemical staining of the lip giant cell tumor. (a) ob. 10×; (b) ob. 20×; (c) ob. 40×.

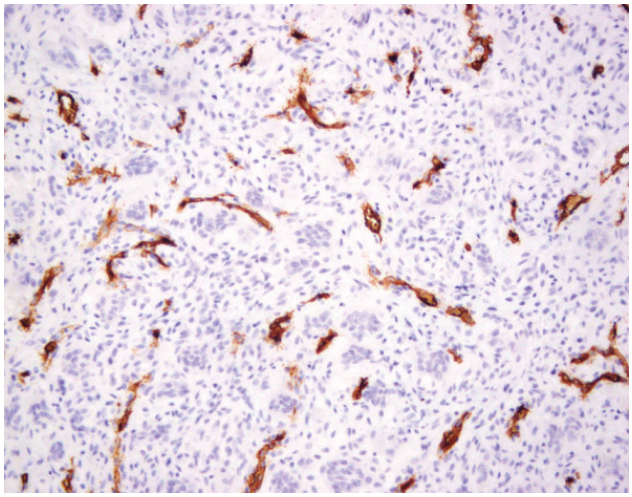

Figure 3 – CD34 immunohistochemical staining of the lip giant cell tumor (ob. 20×).

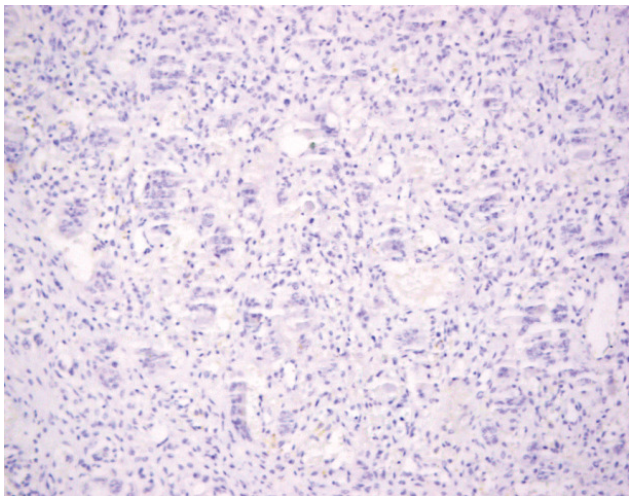

Figure 4 – F13a immunohistochemical staining of the lip giant cell tumor (ob. 20×).

Discussion

GCT-ST should be separated histopathologically from other tumors which can also exhibit pronounced giant cell component such as giant cell tumor of tendon sheath, extraskeletal osteosarcoma, or other benign reactive processes containing abundant osteoclast-like giant cells (4). Malignant GCT-ST is very rare, characterized

by nuclear pleomorphism, atypia and atypical abundant mitoses (5).

CD68 strongly marks the multinucleated giant cells so GCT-STs usually show immunoreactivity for CD68 (6). In accordance with this situation, strong immunoreactivity for CD68 (Figure 2) was found in the multinucleated giant cells in the present study.

GCT-ST of low malignant potential is a rare but clear entity occurring primarily in the soft tissues of the extremities that resemble giant cell tumor of bone with multinodular aggregates (7). GCT-STs have been described in numerous anatomic sites including, trunk, extremities, tendon sheath, superficial and deep fascia, and skeletal muscle (8-14). Uncommon cases have been reported in the head and neck region (15) and to the best of our knowledge GCT-ST of the lip is reported extremely rare.

Size of the GCT-STs in the head and neck localization were reported as 0,7-5 cm (15-17) between 1972 and 2014. Furthermore Righi et al. (15) reported a case of a 36-year-old woman who complained of a painless and superficially located, 1.5-cm cystic mass in the inferior lip. Likewise, here we describe a case of a GCT-ST in the superior lip. The size of the GCT-ST of the present study is in the range of GCT-STs in the head and neck localization and is similar to that of Righi et al. (15).

Age of the patients suffer from GCT-STs in the head and neck localization were ranged from 9 to 92 (15) and nearly half rate in both sexes in the literature. In the present study our patient was 65 year old male.

In the published reports between 1972 and 2015 two each GCT-STs of head and neck region were localized on neck and parotid gland. Other 7 cases were reported in different localizations of head and neck region. As for localization, GCT-ST of lip is reported by Righi et al. (15) and by the present study.

In conclusion, GCT-ST cases should be considered in the differential diagnosis of giant cell rich soft tissue neoplasms. Total excision of this kind of lesions brings about a benign clinical course and tumor-associated death seems to be extremely uncommon.

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