Yanakta soliter fibröz tümör

Solitary fibrous tumor in the malar area

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Abstract

A 15 year old patient presented with a two year old mass on her right malar area that started growing in the last few months. On physical exam, subcutaneous, solid, non-tender, mobile nodül was palpated. On ultrasonography; in the subcutaneous fat tissue of the right malar area a hypoechoic solid nodül with lobulated contours and microcalcifications, was seen. On magnetic resonance imaging; identified the characteristics of the nodül enhancement. The group performed with magnetic resonance imaging enhancement features were identified.Excisional biopsy was performed and diagnosed as solitary fibrous tumor.

Keywords: Malar area, solitary fibrous tumor, magnetic resonance imaging

Öz

Sağ yanağında iki yıldır ağrısız kitlesi olan 15 yaşında kadın hasta, kitle boyutlarında son aylarda artış şikâyeti ile başvurdu. Fizik muayenede sağ yanakta, cilt altında sert, hareketli hassas olmayan kitle palpe edildi. Olgunun yüzünde hissizlik veya fasiyal paralizi yoktu. Ultrasonografi incelemesinde; sağ yanakta cilt altı yağ dokuda, içerisinde mikrokalsifikasyonların izlendiği, lobüle konturlu, hipoekoik solid nodül lezyonu saptandı. Yapılan manyetik rezonans görüntüleme ile kitlenin kontrastlanma özellikleri tanımlandı. Olguya eksizyonel biyopsi yapılarak soliter fibröz tümör tanısı patolojik olarak doğrulandı.

Anahtar Kelimeler: Malar bölge, soliter fibröz tümör, manyetik rezonans görünteleme

Introduction

Solitary fibrous tumor (SFT), is a non-aggressive, spindle cell neoplasm, originating from mesothelial surfaces such as the pleura or peritoneum [1]. However, may be localized in the thorax or head and neck region. Most common extrapleural localization is the oral cavity [2]. Orbita, nasopharynx, salivary glands and paranasal sinuses are also site of localization. Our aim was to present a case of radiologically and pathologically diagnosed solitary fibrous tumor of the [2,3].

Case Report

A 15 year old patient presented with a two year old nodül on her right malar area that started growing in the last few months. She had no pain or loss of sensation. On physical exam, subcutaneous, solid, non-tender, mobile nodül was palpated. There was no sensory loss or facial paralysis. The skin structure was normal. No oropharyngeal ulceration had been detected.

On superficial ultrasonography (US); in the subcutaneous fat tissue of the right malar area a hypoechoic solid nodül

27x13 mm in size, with lobulated contours and microcalcifications, with blood flow on color Doppler US (Image 1) was seen. Magnetic resonance imaging: T1 weighted images showed a slightly heterogeneous hypointense (similar intensity with the neighbouring muscle tissue) multilobular, aproximately 27x22 mm sized nodül (Image 2) and the same nodül on T2 weighted images were seen as heterogeneous hypointense (Image 3), contrast enhanced (Image 4). Excisional biopsy was performed and diagnosed as solitary fibrous tumor. The macroscopical appearance was capsulated, off-white colored in cross sections. On microscopical evaluation no mytosis or necrosis was detected. Immunohistochemical evaluation was CD34 positive, vimentin positive, cytokeratin negative, S-100 negative.

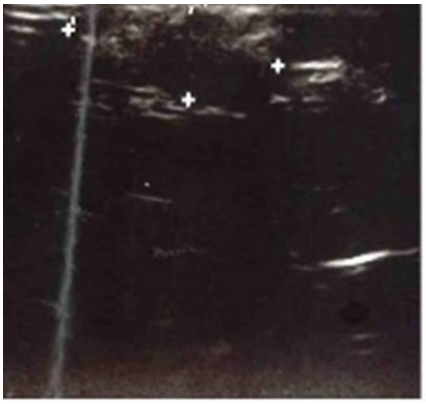

Image 1. Superficial US imaging; hypoechoic solid nodül with microcalcifications inside the right molar area.

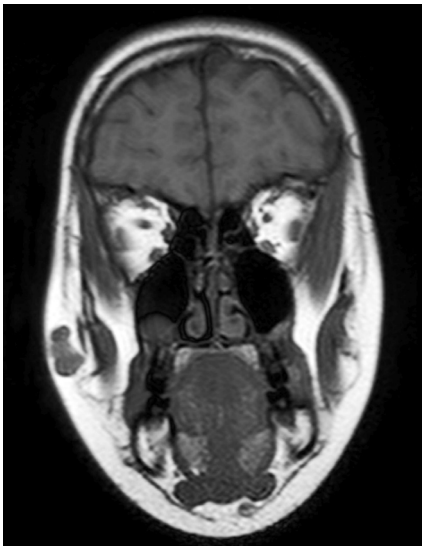

Image 2. T1AG MR coronal ; heterogeneous hypointense mass with similar intensity to the neighbouring muscle planes in subcutaneous right molar area at subcutaneous adipose tissue distance.

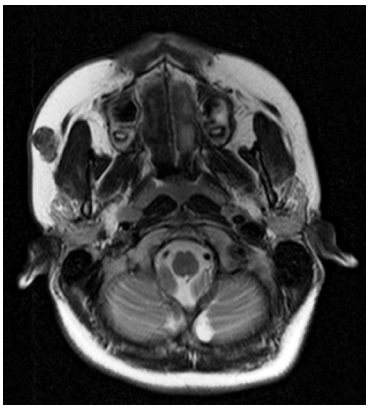

Image 3. T2AG MR axial; heterogeneous hypointense nodül with similar intensity to the neighbouring muscle planes in subcutaneous right molar area at subcutaneous adipose tissue distance.

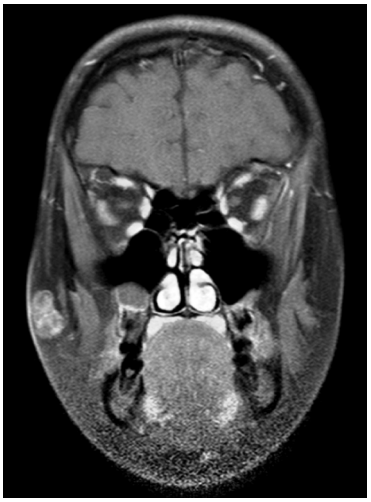

Image 4. T1AG enhanced coronal MR; nodül with heterogeneous enhancement of the right molar area.

Discussion

Solititary fibrous tumors (SFT) are spindle cell tumors related to serosal surfaces especially the pleura. However, they can be located extrapleurally, especially the oral cavity [1]. Other extrapleural localizations are the orbita, thyroid, epidural-intradural spaces, medaistinum and upper respiratory tract [2]. Extrapleural solitary fibrous tumors are usually seen in adults between the age of 20 and 80, equally in men and women [3]. They are generally slow growing pain free nodüls [1].

Squamous cell tumor, hemangioma, lympahngioma, lipoma, lymphoma, soft tissue sarcoma, abscess, lymph node should be considered in the differential diagnosis. Defined masses can be seen in a similar manner and mostly having nonspecific imaging features. The definitive diagnosis is

based on microscopic appearance and immunohistochemical staining characteristics [1]. CD34 is a transmembrane glycoprotein expressed by hematopoietic progenitor cells, endothelium and some mesenchimal stromal cells in the dermis [3]. Tumor cells in solitary fibrous tumors are immunoreactive for CD34 in 90-95% [4]. In our case, the tumor cells showed positive staining for CD34.

On non-enhanced CT the masses are seen as soft tissue mass with same attenuation as muscle tissue. Homogeneous or heterogeneous enhancement may be seen. Although rare, internal calcification and necrosis have been reported in some tumors [3]. These nodüls on magnetic resonance imaging on T1A are seen isointense with the muscle tissue, hypointense on T2A, with homogeneous or heterogeneous enhancement [2,3].

Although most of the SFT's are benign, 13-23% malignancy rate has been reported [1,4]. On imaging malignant tumors were larger and usually necrotic. They usually originate from the parietal pleura or mediastinum [3].

Most of the solitary fibrous tumors, particularly those with extrapleural location are benign and complete surgical resection results with cure [1,2]. In our case, the nodül was solid and pain free. No relapse was seen after the excisional biopsy. Malignant SFT's have invasive growth pattern, cellular pleomorphysm, extreme mitotic activity, and they show frequent recurrence and metastasis. Most common place of metastasis are lungs, bones and liver [2]. The most important prognostic criteria is complete surgical resection [2]. However, local recurrence may be seen in incomplete or complete resections of benign or malignant tumors. It has been suggested that reccurrence can also be treated surgically. Adjuvant chemo- and radiotherapy is arguable [5].

We have presented a case of solitary fibrous tumor with rare localization, confirmed by pathologic evaluation, US and MRI. Although rare, SFT should be considered in the differential diagnosis of soft tissue nodüls.

Declaration of conflicting interests

The author declared no conflicts of interest with respect to the authorship and/or publication of this article.

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