Case Report / Olgu Sunumu

Intranasal angiofibrolipoma

Intranazal anjiyofibrolipom

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Angiofibrolipoma is a rarely seen histopathological variant of lipoma. It is seldom in the head and neck region. Clinically, it shows macroscopic similarity with lipoma. In this article, we report a 65-year-old male case who presented with left-sided nasal obstruction. After complete removal of the tumor, histopathological diagnosis was reported as angiofibrolipoma. To the best of our knowledge, this is the first case report of an angiofibrolipoma of the nose in the literature.

Key Words: Angiofibrolipoma; lipoma; nose.

Anjiyofibrolipom lipomun nadir görülen histopatolojik bir çeşididir. Nadiren baş ve boyun bölgesinde görülür. Klinik olarak lipom ile makroskopik benzerlik gösterir. Bu yazıda, sol taraflı burun tıkanıklığı ile başvuran 65 yaşında bir erkek olgu sunuldu. Tümörün tamamı çıkarıldıktan sonra, histopatolojik tanı anjiyofibrolipom olarak bildirildi. Bildiğimiz kadarıyla, bu olgu, literatürde bildirilen ilk burunda anjiyofibrolipom olgusudur.

Anahtar Sözcükler: Anjiyofibrolipom; lipom; burun.

Angiofibrolipoma is a rare variant of lipoma that is a benign mesenchymal tumor and includes histopathologically mature adipocytes, blood vessels and dense collagenous connective tissue. It's rarely seen in maxillofacial region.[1] Most lipomas cause no severe symptoms and surgical excision is indicated only for cosmetic reasons.[2] Approximately 13% of all lipomas are seen in the head and neck region.[3] According to the characteristic clinical and histopathological features, lipomas are divided into different subtypes which is important in the differential diagnosis and therapeutic approach. The World Health Organization classifies lipomas as classic lipoma, angiolipoma, chondroid lipoma, spindle cell or pleomorphic lipoma and myolipoma.[4] Other authors have classified lipomas histologically as fibrolipomas, angiolipomas, angiofibrolipomas, angiomyolipomas and infiltrating angiolipomas.[5,6] In fact, this classification depends on the ratio of fat, muscle, blood vessels and connective tissue in the structure. For this reason, macroscopic examination of the tumor can be misleading and histopathological analysis must be done for definitive diagnosis.

Available online at
www.kbbihtisas.org
doi: 10.5606/kbbihtisas.2013.04695
QR (Quick Response) Code

Received / *Geliş tarihi:* January 02, 2012 Accepted / *Kabul tarihi:* November 10, 2012

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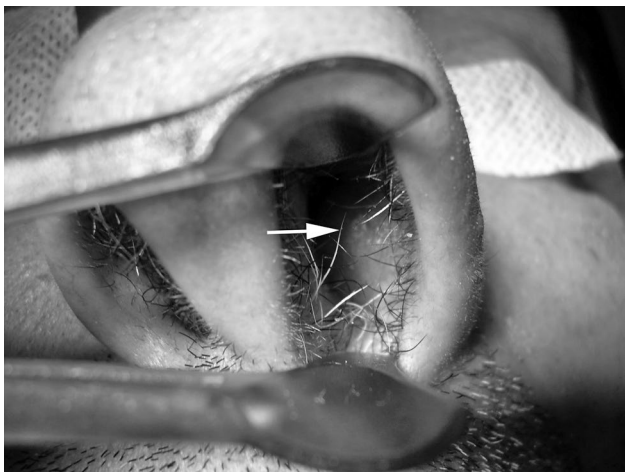

Figure 1. *Nasal examination demonstrated a pale red almost 1 cm diameter mass lesion which was located on the anterior side of the inferior concha (arrow).*

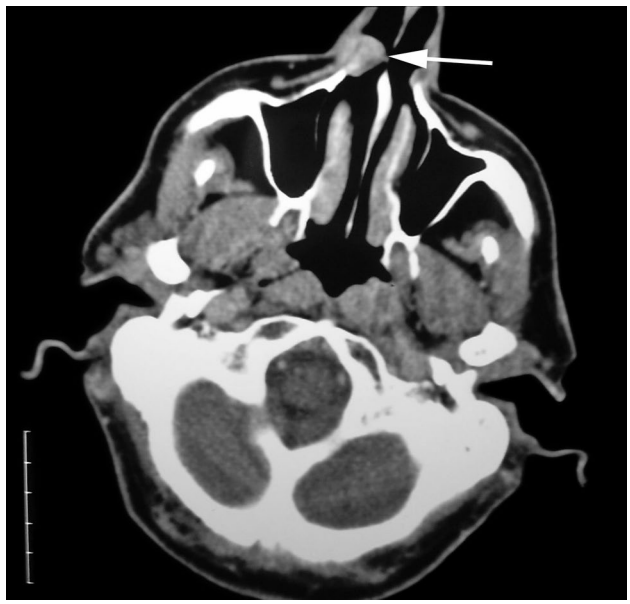

Figure 2. *Paranasal sinus computed tomography image shows a 1 cm diameter, well-circumscribed solid mass lesion (arrow). It originates from the left lateral nasal wall and extends into the nasal vestibule. Narrowing of the nasal cavity is noted.*

In this article, we present an intranasal angiofibrolipoma previously unreported in the literature. The mass was totally excised surgically. There was no recurrence on two-year follow-up.

CASE REPORT

A 65-year-old male patient who complained of left nasal obstruction for six months was admitted to our clinic. He had a septoplasty almost 10 years ago. He did not have any systemic medical problems. Anterior rhinoscopic examination revealed a pale red mass in the left nasal cavity starting from the anterior face of the lower turbinate towards the lateral nasal wall along the vestibule (Figure 1). The color of the covering mucosa was pale red and there were no signs of ulceration or infection. It measured approximately 10 mm in diameter. The mass was well demarcated from the surrounding tissues, semi-mobile, non-pedunculated, soft in consistency, elastic and non-tender. There were no signs of infection. Other otorhinolaryngologic examinations were normal. The paranasal sinus computed tomography examination demonstrated a solid well-demarcated mass lesion with a diameter of 10 mm. The mass originated from the left lateral nasal wall. It extended towards the vestibule causing narrowing of the nasal cavity. There was no invasion of the surrounding soft tissues (Figure 2). The mass was excised totally with blunt dissection (Figure 3a, b). Histopathological examination revealed

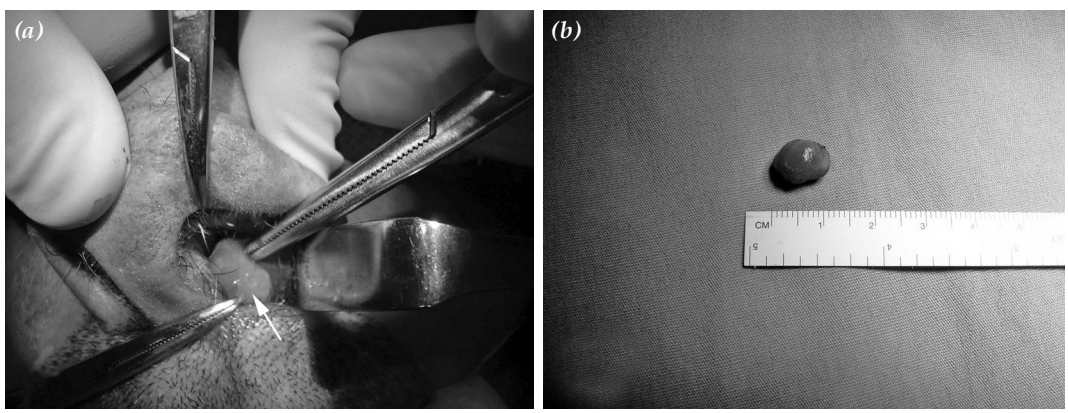

Figure 3. ***(a)*** *The mass (arrow) is surgically excised from the nasal cavity.* ***(b)*** *After removal of the tumor, surgical specimen shows a pale red 1x1cm mass lesion.*

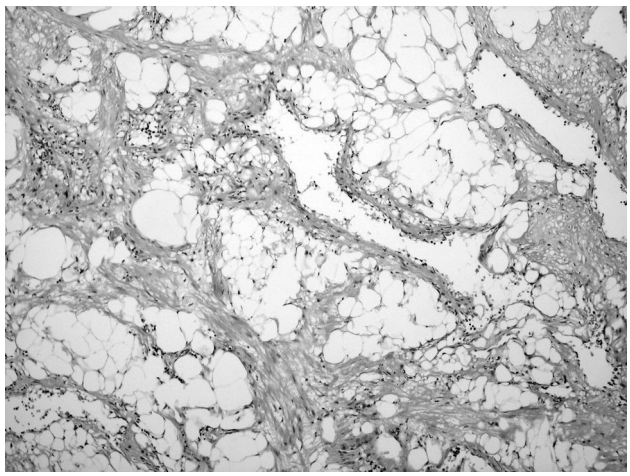

Figure 4. *Histopathological examination after hematoxylin-eosin staining demonstrates mature fat tissue with dilated vascular structures and dense collagen-rich fibrous tissue (H-E x 100).*

numerous vascular channels, surrounded by collagen rich fibrous tissue and mature adipocytes. The histopathological diagnosis of the lesion was angiofibrolipoma (Figure 4). The patient had been under regular follow-up for the past two years with no recurrence.

DISCUSSION

Lipomas are the most common benign soft tissue tumor in adults.[1] They usually grow slowly and cause symptoms depending on their location. The major complaints are due to concerns from aesthetic appearance. In our case, beyond cosmetic problems, the lipoma was directly affecting the quality of life, such as inability to breathe through the nose which is a functional problem. Lipomas generally occur in subcutaneous locations anywhere in the body.[2,7] but are rarely seen in maxillofacial region.[1] Approximately 13% of all lipomas arise in the head and neck region.[3] The etiology is uncertain, although hypercholesterolemia-induced diabetes mellitus, obesity and radiation are considered important risk factors.[8] In addition, it has been reported that genetic factors may play a role in etiology.[9] Trauma is also a significant cause in the development of lipomas.[10] There are two different opinions about the occurrence so-called "traumatic lipomas". The first is that after trauma, adipose tissue prolapses through fascia, resulting in direct impaction. The second opinion is that after soft tissue trauma and hematoma formation, cytokines mediate differentiation and proliferation of preadipocytes, resulting in lipoma formation.[10] In our case, there was a history of iatrogenic nasal trauma. The patient had undergone septoplasty 10 years ago. This anamnestic finding also supports the theory of slow growth of lipomas, which develop over several years.[1,3] Lipomas have been classified histologically as fibrolipomas, angiolipomas, angiofibrolipomas, angiomyolipomas and infiltrating angiolipomas.[5,6] One of the rarest seen histopathological variants of lipoma is angiofibrolipoma.[1] Angiofibrolipoma histologically consists of mature adipocytes, blood vessels, and bundles of collagenous connective tissue. It is not encapsulated but is well separated from surrounding tissue[5,6] and demonstrates low to moderate cellularity. It is clinically non-aggressive.[6] Angiofibrolipoma has been reported in the buccal mucosa,[1] external auditory canal,[5] tonsil,[11] kidney,[12] greater omentum,[13] transverse colon[14] and spermatic cord[15] but no case of angiofibrolipoma in the nasal cavity has been previously reported in the English literature. To the best of our knowledge, the present case study is the first report of an angiofibrolipoma of the nasal region.

The physical examination can be misleading, and definite diagnosis requires histopathological examination of the surgical specimen after excision.

Differential diagnosis of lipoma might include some benign connective tissue lesions, such as granular cell tumor, neurofibroma, traumatic fibroma and salivary gland lesions (mucocele and mixed tumor).[16]

The treatment of choice for a patient with angiofibrolipoma is complete surgical excision, which is expected to be curative. Although rare, long-term follow-up for recurrence is recommended. On follow-up of our patient, there was no recurrence in two years time.

In conclusion, we presented a case of an uncommon neoplasm with an unusual location. Total resection of the angiofibrolipoma resulted in considerable improvement in nasal airway passage. Angiofibrolipoma should be kept in mind in the differential diagnosis of masses in the nasal region.

Declaration of conflicting interests

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

Funding

The authors received no financial support for the research and/or authorship of this article.

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