Case Report / Olgu Sunumu

Solitary fibrous tumor of the accessory parotid gland: a unique case

Aksesuvar parotis bezinin izole fibröz tümörü: Benzersiz bir olgu

Tayfun Apuhan, M.D.,[1] Hans Iwenofu, M.D.,[2] Enver Özer, M.D.[1]

[1]*Department of Otolaryngology, Ohio State University, Ohio, USA*
[2]*Department of Pathology, Ohio State University, Ohio, USA*

Solitary fibrous tumors are benign spindle-cell neoplasms, mostly originating from the visceral pleura. They are common in individuals aged 20-70 with no sex predilection. To our knowledge, this is the unique case of the solitary fibrous tumor originating from the accessory parotid gland in the literature.

Key Words: Accessory parotid gland; hemangiopericytoma; solitary fibrous tumor.

İzole fibröz tümörler, genellikle benign iğsi hücreli neoplazmlar olup, genellikle viseral plevradan köken alır. Cinsiyet ayrımı olmaksızın, 20 ila 70 yaş arasında sıkça görülür. Bilgimiz dahilinde, bu, literatürde aksesuvar parotis bezinden köken alan tek izole fibröz tümör olgusudur.

Anahtar Sözcükler: İzole fibröz tümör; aksesuvar parotis bezi; hemanjiyoperisitom.

Solitary fibrous tumor (SFT) was first described in 1931. These mesencymal neoplasms of subepithelial origin were commonly termed as hemangiopericytomas (HPCs) in the past.[1] These tumors are usually composed of benign spindle cells that mostly originate from the visceral pleura and are observed between the ages of 20-70 years with no sex predilection. But more recently they have been described in many extra-serosal sites such as lung, mediastinum, abdominal wall, liver, gastrointestinal tract, pelvic space, spinal cord and deep soft tissues of the extremities.[1,2]

They have been reported to occur in various subsites of the head and neck, including the nasal cavity, nasopharynx, paranasal sinuses, parapharyngeal speaces, thyroid, parotid and salivary glands, and orbit.[3,4] To our knowledge, this is the unique case of the SFT originating from the accessory parotid gland.

CASE REPORT

A 51-year-old male presented with a two-year history of swelling in the right midface. He denied pain, progression, numbness or tingling sensations. His facial nerve functions were all intact. Head and neck examination revealed a 4 cm mobile, firm mass at the right anterior parotid region without any skin change. Computed tomography of the neck showed a 3.3x3.6 cm soft tissue mass with diffuse enhancement in

Available online at
www.kbbihtisas.org
doi: 10.5606/kbbihtisas.2013.42714
QR (Quick Response) Code

Received / *Geliş tarihi:* September 23, 2011 Accepted / *Kabul tarihi:* November 23, 2011

Correspondence / İletişim adresi: Tayfun Apuhan, M.D. Hisar Intercontinental Hospital Kulak Burun Boğaz Kliniği, Saray Mah. Site Yolu Cad. No: 7, 34768 Ümraniye, İstanbul, Turkey.

Tel: +90 505 - 809 75 80 e-mail *(e-posta):* drtayfunapuhan@gmail.com

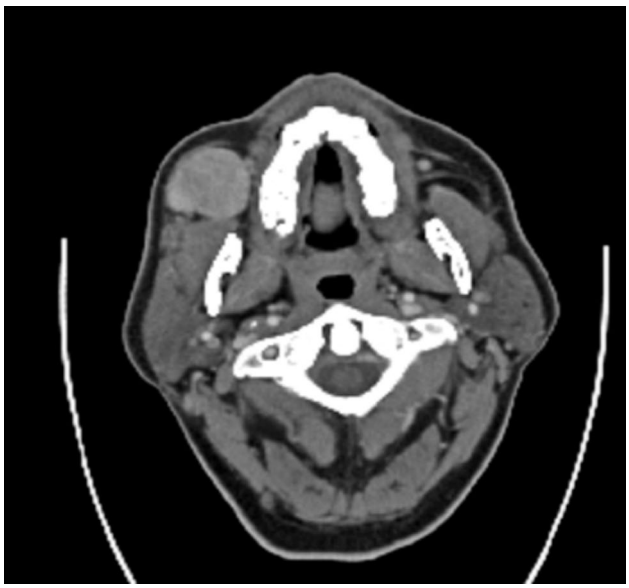

Figure 1. *Computed tomography of the neck showed a 3.3x3.6 cm soft tissue mass.*

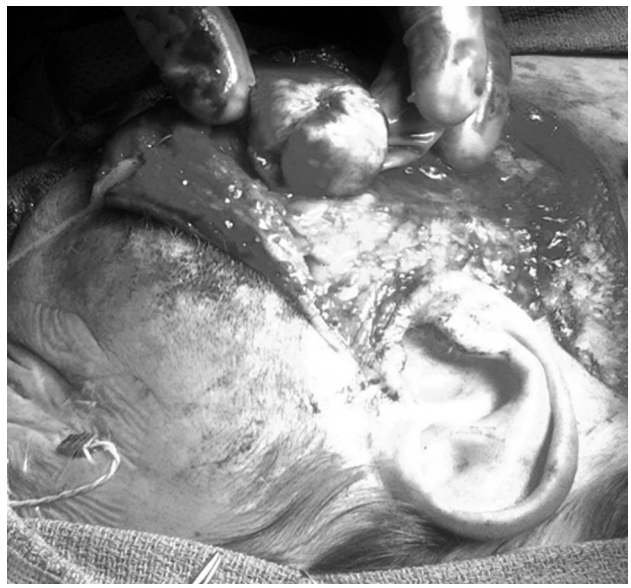

Figure 2. *Intraoperative view of the right accessory parotid mass.*

the right midface anterior to the parotid gland (Figure 1). Fine needle aspiration biopsy (FNAB) was consistent with possible pleomorphic adenoma. He underwent excision of the mass with facial nerve monitoring and dissection through a modified Blair incision. The Stensen duct was also identified and preserved. Grossly, the specimen consisted of a 4.4x3.0x2.8 cm previously incised, well circumscribed rubbery gray to pink-tan tissue (Figure 2).

Histologic sections showed a circumscribed neoplasm consisting of a banal spindle cell neoplasm composed of short fascicles of spindle cells with patternless pattern punctuated by pericytomatous vascular channels with interstitial and perivascular hyalinization. The banal spindle cell neoplasm was composed of short fascicles of spindle cells with variable interstitial hyalinization and staghorn (pericytomatous) vessels (Figure 3). Immunoperoxidase stains showed the lesional cells were strongly and diffusely immunoreactive for CD34 and BCL-2, focally positive for CD99 with rarely positive cells for epithelial membrane antigen (EMA) and negative for S-100 and Melan-A stains (Figure 4). A diagnosis of solitary fibrous tumor was made.

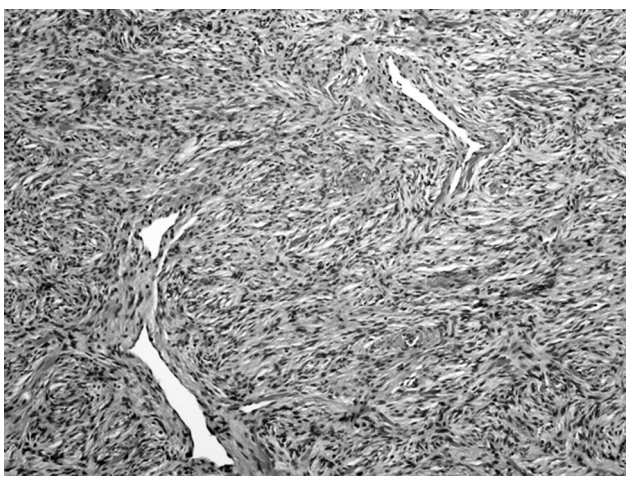

Figure 3. *Banal spindle cell neoplasm composed of short fascicles of spindle cells with variable interstitial hyalinization and staghorn (pericytomatous) vessels (H-E x 100).*

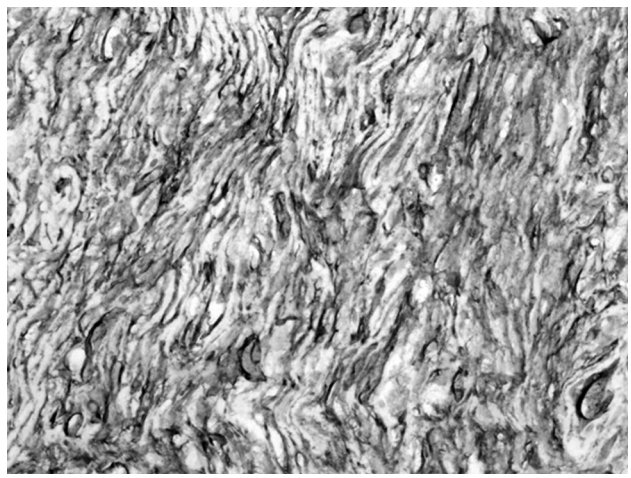

Figure 4. *Diffuse CD34 reactivity in the lesional cells (CD34, x 400).*

DISCUSSION

The accessory parotid gland is a salivary gland separate from, and approximately 0.6 cm anterior to the main parotid gland. It occurs in 21%-69% of individuals.[5] Its own duct empties into the Stensen duct. Accessory parotid lesions are clinically rare and patients consistently complained of a painless mass in the mid-cheek without obvious symptoms.[2,5] The physical examination reveals a mobile, firm, solid mass with clear boundaries. There are numerous causes for chronic cheek swelling, including diffuse inflammatory changes, masseteric hypertrophy, lymphadenopathy and neoplasia.[2] Solitary fibrous tumor typically develops as a well-circumscribed lesion that common presents as a slow-growing, painless mass. Physical examination and imaging findings are nonspecific. Radiographic imaging appearance is nonspecific.[2,4,5]

Solitary fibrous tumors are typically tan to pink-colored, lobulated soft tissue masses. Definitive diagnosis is not usually made until after tumor resection. The final diagnosis of SFT is based on the microscopic appearance and characteristic immunohistochemical analysis. This tumor usually shows positivity for CD34, CD99, laminin, vimentin, and type IV collagen. It is characteristically positive for CD34. Solitary fibrous tumor is typically negative for S-100, cytoplasmic keratin, calretinin, hector battifora mesothelial-1 (HBME-1), and muscle specific markers.[6]

The recommended treatment for SFTs in the head and neck region is complete excision and long-term follow-up without adjuvant therapy. Typically, they are relatively slow-growing and benign tumors with a favorable outcome. The risk of local recurrence and metastasis correlates to tumor size, tumors with a histologically malignant component including increased mitotic figures, nuclear pleomorphism, hypercellularity and positive surgical resection margins.[4,6]

In conclusion, solitary fibrous tumor is a very rare tumor of the head and neck with low malignant potential. This study presented a unique case of SFT originating from the accessory parotid gland. Close, long term follow-up is recommended in these cases due to their increased risk of local recurrence.

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.

REFERENCES

1. Kessler A, Lapinsky J, Berenholz L, Sarfaty S, Segal S. Solitary fibrous tumor of the nasal cavity. Otolaryngol Head Neck Surg 1999;121:826-8.
2. De Riu G, Meloni SM, Massarelli O, Tullio A. Management of midcheek masses and tumors of the accessory parotid gland. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2011;111:e5-11. doi: 10.1016/j.tripleo.2011.01.005.
3. Toh H, Kodama J, Fukuda J, Rittman B, Mackenzie I. Incidence and histology of human accessory parotid glands. Anat Rec 1993;236:586-90.
4. Furze AD, Peng Y, Myers LL. Pathology case quiz 2. Solitary fibrous tumor of the nasal cavity and ethmoid sinus with intracranial extension. Arch Otolaryngol Head Neck Surg 2008;134:334, 336-7.
5. Stenner M, Preuss SF, Hüttenbrink KB, Klussmann JP. Accessory parotid gland lesions: case report and review of literature. Eur Arch Otorhinolaryngol 2008;265:1135-8. doi: 10.1007/s00405-008-0580-5.
6. Santeusanio G, Schiaroli S, Ortenzi A, Mulè A, Perrone G, Fadda G. Solitary fibrous tumour of thyroid: report of two cases with immunohistochemical features and literature review. Head Neck Pathol 2008;2:231-5.