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CASE REPORT

A case of lipoma of the deep lobe of the parotid gland

Derin lob yerleşimli parotis lipomu: Olgu sunumu

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Lipoma of the deep lobe of the parotid gland is extremely rare. A forty-two-year-old man presented with a painless, soft, and slow-growing mass in the left preauricular area. Ultrasonography and computed tomography findings were consistent with lipoma. The patient was treated with superficial parotidectomy and total excision of the mass with preservation of the facial nerve. Histologic findings confirmed the diagnosis. No recurrences were detected during 1.5 years in the postoperative period.

Key Words: Lipoma/pathology/surgery; parotid neoplasms/pathology/surgery.

Derin lob yerleşimli parotis lipomu son derece nadirdir. Kırk iki yaşındaki bir erkek hastada sol preauriküler bölgede ağrısız, yumuşak, yavaş büyüme gösteren bir kitle saptandı. Ultrasonografi ve bilgisayarlı tomografi, lipom özellikleriyle uyumlu bulgular ortaya koydu. Hasta yüzeyel parotidektomi ve tümörün total eksizyonuyla tedavi edildi; fasyal sinir korundu. Histolojik bulgular tanıyı doğruladı. Ameliyattan sonra 1.5 yıllık izlemde herhangi bir nükse rastlanmadı.

Anahtar Sözcükler: Lipom/patoloji/cerrahi; parotis neoplazmları/patoloji/cerrahi.

Lipomas are the most common soft-tissue neoplasm of mesenchymal origin. Only 13% of them arise in the head and neck region, most of which occur in the posterior neck. Rarely, they may develop in the anterior neck, infratemporal fossa, and in or around the oral cavity, pharynx, larynx, and the parotid gland.[8/1] They are often not considered in the initial differential diagnosis of parotid gland tumors. They are more often found in males with a male to female ratio of 10:1, and are usually recognized in the fourth and sixth decades of life as an expanding mass.[6,9/2,3] Large series of parotid tumors found the frequency of occurrence as 1-2% for lipomas.[2,3/4,5] Moreover, parotid lipoma located in the deep lobe is exceedingly rare.[5,10/6,7] They present with few symptoms until they expand, causing compression and obstruction of the involved gland. In this paper, a case of lipoma located in the deep lobe of the parotid gland is presented.

CASE REPORT

A forty-five-year-old man presented with a painless and slow-growing left preauricular mass of a five-year history. Physical examination revealed a soft, mobile, and well-localized mass that was not attached to the overlying skin. No other cause was found such as an infectious process or a history of trauma, nor was there any

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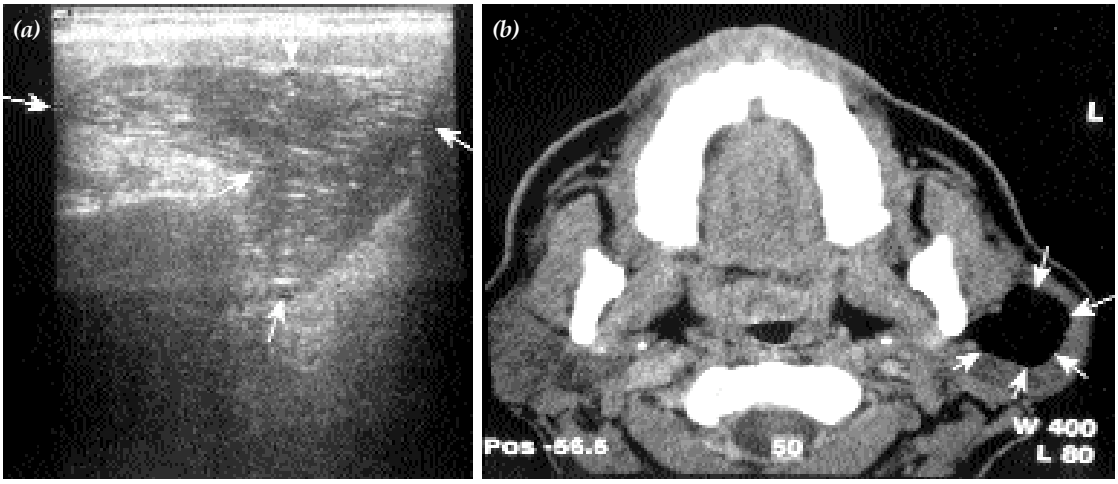

Fig. 1 – ***(a)*** *An oblique-sagittal sonogram of the parotid gland showing a well-defined, homogeneous, and hypoechoic mass located in the deep tissue. The borders of the mass are designated by arrows.* ***(b)*** *An axial CT scan with contrast showing a hypodense mass (arrows) in the left parotid region.*

cervical lymphadenopathy suggesting a malignancy or an infection. Ultrasonography (US) and computed tomography (CT) were used for diagnosis and surgical planning. A transverse sonogram of the parotid gland revealed a hypoechoic and readily compressible mass located in the deep lobe (Fig. 1a). An axial CT scan with contrast demonstrated an intraparotid hypodense mass of 4x3x1.5 cm, involving the deep lobe of the left parotid gland (Fig 1b). Both CT and US indicated lipoma as a probable diagnosis.

A surgical approach was planned with an incision extending from the preauricular region to the retromandibular area. The vertical end of the incision started immediately anterior to the tragus and passed in a curved path just beneath the lobule posteriorly and then inferiorly into an appropriate crease in the submandibular skin (Fig. 2a). A sharp dissection was required to expose the superficial lobe of the parotid gland. At the level of the superficial lobe, it was observed that the mass was too deeply located for total enucleation, so a total excision after superficial parotidectomy was performed with preservation of the facial nerve (Fig. 2b).

Macroscopically, it was a lipomatous mass, brownish-yellow in colour, measuring 4.7x3.5x1.5 cm (Fig. 2c). Microscopically, a tumoral mass surrounded by a fibrous capsule was detected under the salivary gland tissue. After hematoxylin-eosin staining, mature adipocytes separated by fine fibrous septae were observed, which were consistent with lipoma (Fig. 3).

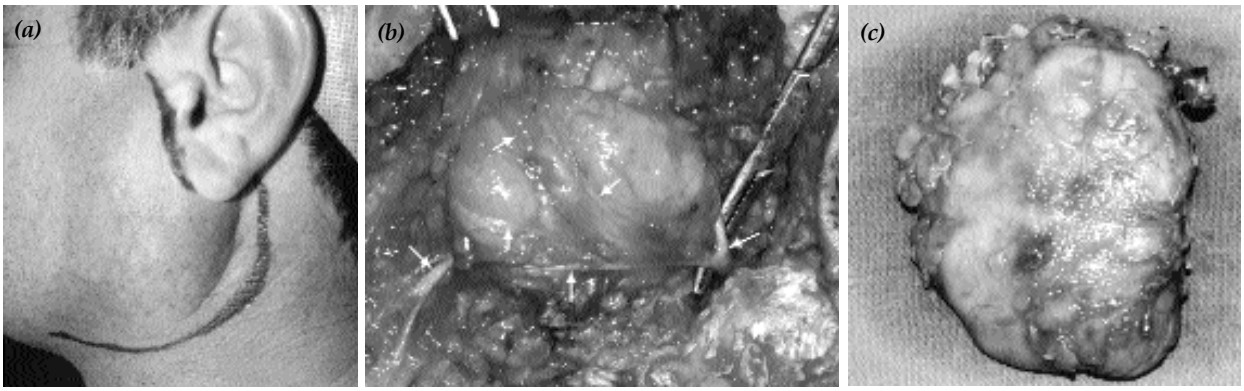

Fig. 2 – ***(a)*** *The appearance of the preauricular mass and pre-surgical markings.* ***(b)*** *A view of the lipomatous mass after superficial parotidectomy. Facial nerve trunk and its branches are indicated by arrows.* ***(c)*** *Macroscopic wiew of the mass after total excision.*

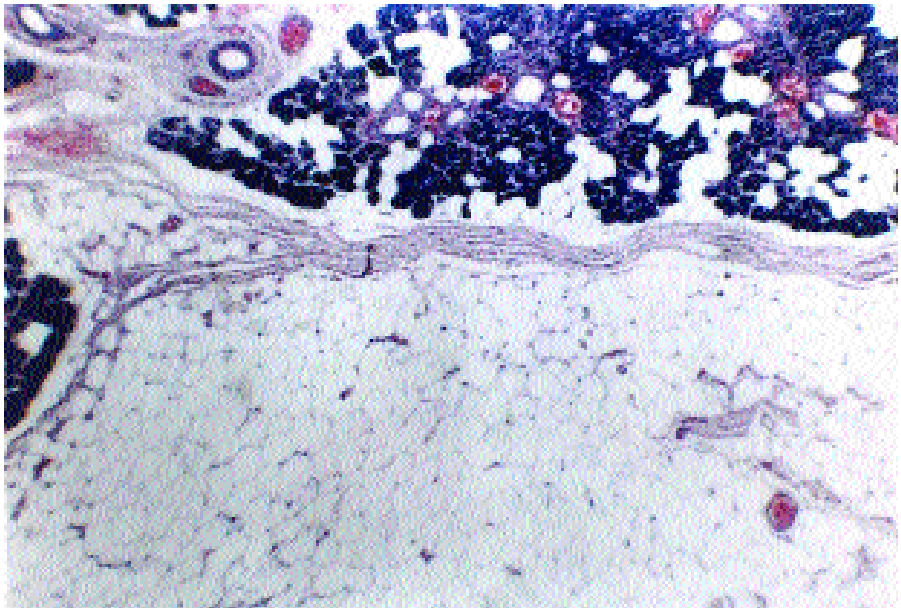

Fig. 3 – *Microscopic view of the tumor consisting of mature adipocytes separated by fine fibrous septae. The lipoma is separated from the salivary gland by a fibrous cap - sule (H-E x 100).*

No recurrences were detected during a 1.5-year follow-up.

DISCUSSION

Lipomas are one of the rare tumors of the parotid gland. The treatment of a parotid lipoma is largely dependent on its location. Lipomas of the superficial lobe or paraparotid region are easily dealt with by simple enucleation, whereas complete superficial parotidectomy should be performed for deep lobe tumors, the removal of which requires and may be complicated by the necessity for mobilization and retraction of the facial nerve.[7/8]

There are no unique clinical features by which lipomas can be differentiated from other parotid gland tumors. The differential diagnosis should include pleomorphic adenoma, Warthin's tumor, oncocytoma, sebaceous adenoma and lymphadenoma, sialadenoma papilliferum, hemangioma, and lymphangioma.[6/3]

Several imaging techniques can be used in the diagnosis and evaluation of parotid gland masses, including CT, US, magnetic resonance imaging, and sialography. Ultrasonography is often the first method of choice in salivary gland tumors. During US evaluation, lipoma of the salivary gland should be suspected when an oval shaped, slightly hypoechoic mass with a typical feathered appearance and good compressibility is visualized. Due to their negative homogeneous attenuation values lipomas can be diagnosed specifically by CT.[1/9]

Our extensive literature search revealed only three cases of lipoma of the deep lobe of the parotid gland. Although the treatment modality is the same for any other tumor encountered in this location, it is of great clinical importance to know that lipomas have tendency to develop in the subcutaneous tissue, while liposarcoma arises from the deeper tissues.[4/10] In this respect, it would be life saving to consider the possibility of liposarcoma when a mass, which was diagnosed as lipoma, recurs in the deep lobe of the parotid gland.

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