Kulak Burun Bogaz Ihtis Derg
2004;12(1-2):42-44

CASE REPORT

Schwannoma of the upper lip: a case report

Üst dudak schwannomu: Olgu sunumu

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Schwannomas are neurogenic tumors that arise from the Schwann cells of the nerve sheath. They are benign, usually solitary, and encapsulated neoplasms. In this report, a 29-year-old woman with a complaint of painless swelling in the upper lip is presented. Computed tomography showed a well-circumscribed solid mass. The lesion was excised and histopathologic diagnosis was made as schwannoma. The postoperative course was uneventful. No recurrence was observed during a follow-up period of 12 months.

Key Words: Lip neoplasms/radiography/surgery/pathology; neurilemmoma/radiography/surgery/pathology.

Schwannomlar sinir kılıfının Schwann hücrelerinden kaynaklanan nörojenik kökenli tümörlerdir. Benign kapsüllü ve soliter lezyonlardır. Bu yazıda, üst dudakta ağrısız şişlik şikayetiyle kliniğimize başvuran 29 yaşında bir kadın hasta sunuldu. Bilgisayarlı tomografide düzgün sınırlı solid kitle lezyonu saptandı. Tükürük bezi tümörü öntanısıyla eksize edilen kitlenin histopatolojik tanısı schwannom idi. Ameliyattan sonra sorunu olmayan hastanın 12 aylık izleminde nüks görülmedi.

Anahtar Sözcükler: Dudak neoplazileri/radyografi/cerrahi/patoloji; nörilemmoma/radyografi/cerrahi/patoloji.

Schwannomas or neurilemmomas are neurogenic tumors that arise from the nerve sheath or Schwann cells.[1] Approximately 25-30% of all neurilemmomas arise in the head and neck[1] but they rarely originate from the oral cavity.[2] Schwannomas of the oral cavity most commonly occur in the tongue followed by palate, floor of the mouth, gingiva, lip, and the buccal mucosa.[3] To the best of our knowledge, only two cases of upper lip schwannoma have been reported in the literature.[3,4] This is the third case to be reported. In this report the clinicopathological and immunohistochemical characteristics of the lesion are discussed in relation to those reported previously.

CASE REPORT

A 29-year-old woman presented with a complaint of painless swelling in the upper lip. She stated that the lesion had a two-month history and enlarged progressively. Medical history was insignificant. She had no history of alcohol consumption or smoking.

On otolaryngologic examination, a firm, mobile and nontender mass, approximately 2 cm in diameter was palpated. The neck examination and general physical examination were normal.

Computed tomography (CT) revealed a homogeneous mass, 1.9 cm in diameter, with sharp contours, obliterating the soft tissue planes (Fig. 1a, b).

Fine-needle aspiration specimen of the lesion was insufficient. The most probable clinical diagnosis was a salivary gland tumor. The tumor was excised with care without injuring its capsule (Fig. 2). Because there is a high possibility of malignancy (50%) for

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◆ *Received - February 5, 2003 (Dergiye geliş tarihi - 5 Şubat 2003). Accepted for publication - June 6, 2003 (Yayın için kabul tarihi - 6 Haziran 2003).*

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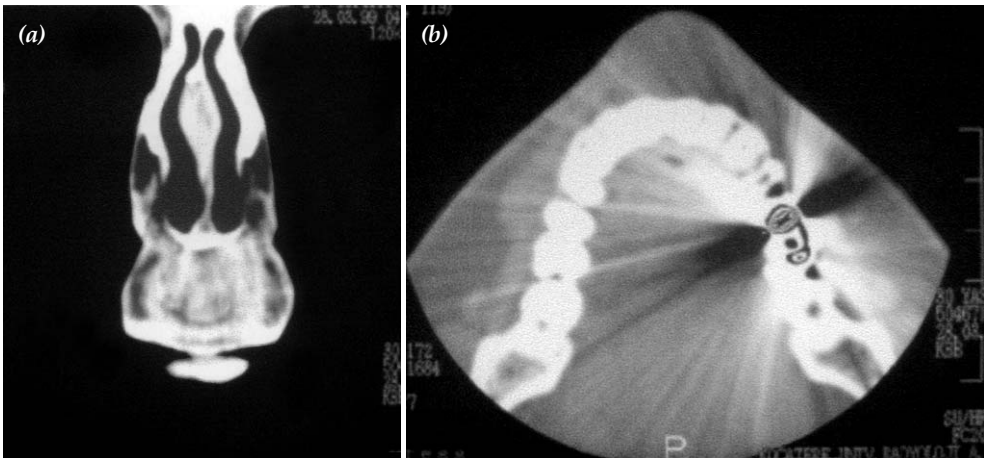

Fig. 1 - ***(a)*** *A computed tomography scan in the coronal plane showing the lesion inside the upper lip.* ***(b)*** *An axial scan showing the tumor with clear margins.*

extraglandular salivary gland tumors,[5] tumor excision was performed with frozen section control which showed a benign lesion. The specimen consisted of an encapsulated, yellowish-white, and ovoid nodule measuring 2 cm in diameter. Microscopically, in most areas, the tumor was cellular, composed of spindle cells often arranged in a palisading fashion (Fig. 3a). Focal areas were edematous (Fig. 3b). Mitoses were absent. Immunohistochemical staining by the streptavidin-biotin-peroxidase method demonstrated S-100 protein positivity in tumor cells. These findings were consistent with a diagnosis of schwannoma.

DISCUSSION

Schwannomas are benign, usually solitary, encapsulated neoplasms. They develop in the head and neck region both in peripheral cranial nerves and intracranially. The acoustic nerve is the most common intracranial site whereas peripheral cranial nerve schwannomas are usually located in soft tissues such as the tongue.[6] If the nerve of origin is

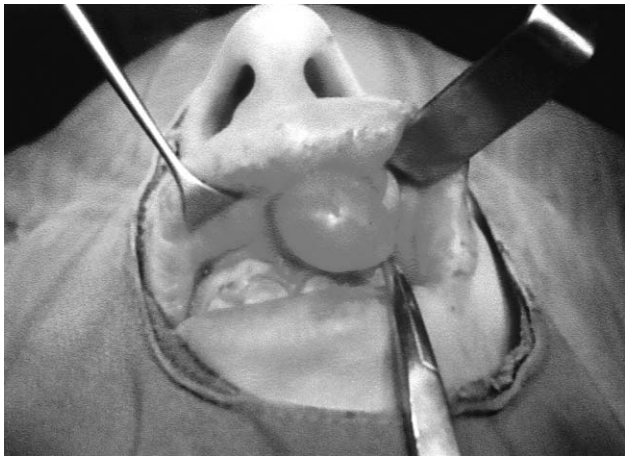

Fig. 2 - *Intraoperative appearance of the well-capsulated tumor.*

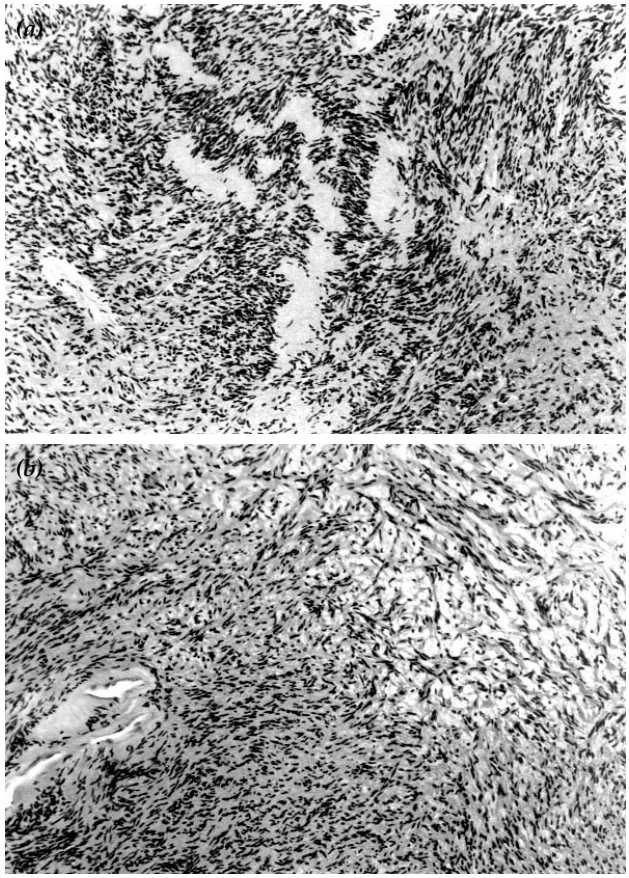

Fig. 3 - ***(a)*** *Cellular areas with palisading spindle cells.* ***(b)*** *Cellular and edematous areas in the tumor (H-E x 200).*

small it may never be identified; however, if the nerve of origin is large, the tumor generally develops inside the epineural sheath and undergoes progressive enlargement, with the nerve fasicles spreading out of the surface of the tumor.[1]

Histologically, two characteristic patterns are described as Antoni A and Antoni B areas, both of which may be found in the same tumor. Type A areas consist of a delicate arrangement of connective and reticular fibers in serpentine and branching formations.

The interposed nuclei are somewhat plump with blunted ends and are aligned in rows with intervening spaces devoid of nuclei (palisading). Often, this organization of cells and fibers assumes an organoid appearance suggesting an exaggerated tactile corpuscle called a Verocay body. Type B areas consist of loosely arranged cells set in a meshwork of delicate reticulum fibers and small cystic spaces. The cystic degeneration is of a serous type and the microcysts may coalesce to form large cystic areas often seen grossly. Throughout the tumor, thick collagen sheaths may be seen surrounding the blood vessels, sometimes with occasional areas of hemorrhage.[1] Immunohistochemistry and electron microscopy may be helpful in some cases in which routine histological diagnosis is difficult. A regular positive reactivity to S-100 protein and Leu-7 antigen supports the schwann cell nature of these tumors and rules out other non-neural diagnoses. Vimentin and glial fibrillary acid protein staining is also helpful.[2]

The tumor may occur at all ages with the highest incidence in the second and third decades of life.[6] The male to female ratio is 2/3.[1]

In the majority of cases, the only complaint is the appearance of a mass. Pain, tenderness, paresthesia, and dysphagia are less frequently seen in intraoral schwannomas.[1]

Radiologic modalities may vary. Ultrasonography may show a posterior acoustic enhancement in an upper lip schwannoma.[3] Computed tomography generally shows a homogeneous soft tissue density with clear margins as seen in our patient. Sometimes cystic degenerations inside the lesion may be present.[3]

Because schwannomas are rare tumors with a nonspecific presentation, clinical diagnosis of these benign tumors may be challenging. They may be confused with fibromas, pleomorphic adenomas, and with other salivary gland tumors.[2] The initial diagnosis was salivary gland tumor in our case; however, it turned out to be a schwannoma on pathologic examination.

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