OLGU SUNUMU CASE REPORT

DOI: 10.24179/kbbbbc.2020-78260

Schwannoma of the Tongue in a Paediatric Patient

Çocukta Dilde Yerleşen Schwannoma

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ABSTRACT Schwannomas are benign, encapsulated, slowly-growing tumor of the developing neural sheath's Schwann cells. Aetiology is unknown. They are often seen in the head and neck region. Only 1% of them are encountered in the oral cavity. Tongue is the most common location in the oral cavity region. A 16-year-old male patient admitted to our clinic with a history of slowly growing swelling on the tip of the tongue. Diagnosis was confirmed by excisional biopsy. There was no recurrence in follow-up of 1 year after the operation. Because of its rarity in oral cavity specially in pediatric age, the case is presented.

Keywords: Schwannoma; neurilemmoma; pediatric; oral cavity; tongue

ÖZET Schwannomalar periferik sinirlerin kılıfından kaynaklanan iyi huylu tümörlerdir. Etiyolojisi bilinmemektedir. Sıklıkla baş-boyun yerleşimi gösterirler. Sadece %1'ine oral kavitede rastlanır. Oral kavitede, en sık dilde yerleşim gösterir. 16 yaşındaki erkek hasta dilinde 1 ay içinde meydana gelen ve büyüme gösteren kitle ile başvurdu. Eksizyonel biyopsi ile histopatolojik tanısı doğrulandı. Ameliyattan sonraki 1 yıllık izlemde nüks görülmedi. Oral kavite schwannomalarının özellikle çocuk yaş grubunda nadir görülmesi ve oral kavite kitlelerinin, ayırıcı tanısında düşünülmesi gerektiği nedeniyle sunulmuştur.

Anahtar Kelimeler: Schwannoma; nörilemmoma; pediatrik; oral kavite; dil

CASE REPORT

A 16-year-old male patient was admitted to the clinic due to painless swelling on his tongue in the last month. The patient did not describe any difficulty in speaking, swallowing, or chewing. During the oral examination of the patient, a fluffy, gray colored, hard mass was observed on the tip of his tongue of approximately 1x1 cm (Figure 1). In palpation, the mass was medium hard, painless, smooth surfaced and mobile. Considering the size and location of the mass, a transoral total excision under local anesthesia was performed. Histopathological examination of the surgical specimen revealed as schwannoma, and diffuse nuclear and cytoplasmic staining was seen in tumor tissue with S-100 (Figure 2). Histopathological examination composed of spindle-shape neural cells arranged in Antoni A pattern with Verocay bodies (Figure 3).The patient has not shown any recurrence in follow-up period of 1 year.

DISCUSSION

Schwannoma, also known as neurilemmoma, is a tumor that develops from benign, encapsulated, slowly-growing neural sheath schwannoma cells.[1] Although the causes are unknown, some etiologic factors like radiation exposure, chronic irritation and trauma are conjectured. The incidence of tongue schwannomas in men and women is equal. If schwannoma reaches large sizes, symptoms occur. Generally, schwannomas developing on the posterior 2/3 of the tongue may cause difficulty in swallowing and symptoms of weakening.[2] In our case, since the placement of the mass was on the tongue tip, it did not give any symptoms.

Oral cavity schwannomas are most common in 2-4 decades. In children, quite a few cases have been reported in the literature.[3] The youngest case is a 7-year-old boy.[4] Our case was 16 years old. Approxi-

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Peer review under responsibility of Journal of Ear Nose Throat and Head Neck Surgery.

Received: 04 Aug 2020 ***Received in revised form:*** 24 Oct 2020 ***Accepted:*** 27 Oct 2020 ***Available online:*** 11 Feb 2020

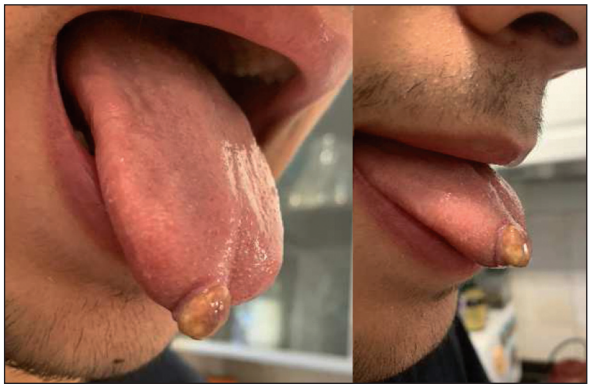

FIGURE 1: Schwannoma mass at the tip of the tongue.

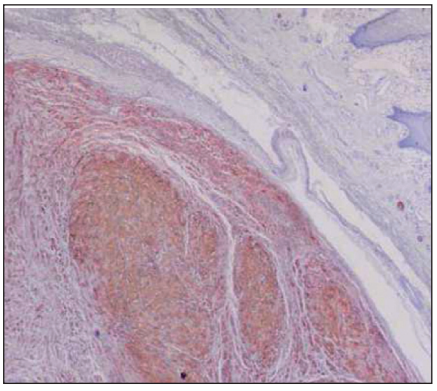

FIGURE 2: Immunohistochemical S-100 staining in schwannoma cells.

mately half of the cases occur in the head and neck region. Only 1% of these are found in the mouth. They are not considered in the differential diagnosis of oral cavity tumors because they are rare. Tongue is the most common location in the oral cavity region.[2,3] The tongue is followed by the palate, the floor of the mouth and the buccal mucosa and mandible.[3] Only half of the tongue schwannomas are directly related to the nerve. It is difficult to differentiate the hypoglossal, lingual and glossopharyngeal nerve in the tongue.[3] Although they are slowly growing tumors, the fact that it emerged and grew within 1 month caused suspicion of malignancy and early intervention was performed in our case.

Schwannomas are often seen as a single lesion and are encapsulated. Multiple ones may be associated with neurofibromatosis.[5] In neurofibromatosis cases, 15% malignant transformation is observed.[5] In histopathological examination, two patterns, Antoni A and Antoni B, are seen under the capsule.[1] Antoni A areas are hypercellular areas formed by nucleus and spindle cells. Antoni B areas are hypocellular areas.[6] Immunohistochemical examinations may be useful when there is difficulty in differential diagnosis. Schwannomas have S-100 protein positive cells.[6] In our case, S-100 was found positive. The treatment of schwannomas is surgery. Recurrence is generally not observed in total excisions.[7] In the tumors located in the tongue root, intervention with carbon dioxide laser was observed in the literature. Transcervical (submanduibular and transhyoid approach) excision in large tumors also was observed. In differential diagnosis, malignant tumors and a large number of benign lesions (lipoma, traumatic fibroma, adenoma, leiomyoma etc.) should be ruled out.[8]

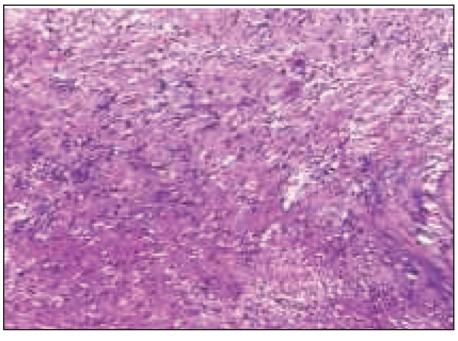

FIGURE 3: Spindle-shaped neural cells arranged in Antoni A pattern with Verocay bodies (Hemotoxilen-Eozine).

As a result, although they are benign masses, schwannomas can recur when not fully removed, rarely show malignant transformation, and can be seen in many parts of the body. They should be considered in the differential diagnosis of tongue masses.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: *Meltem Tulğar;* ***Design:*** *Meltem Tulğar;* ***Control/Supervision:*** *Meltem Tulğar;* ***Data Collection and/or Processing:*** *Sibel Baştimur;* ***Analysis and/or Interpretation:*** *Meltem Tulğar;* ***Literature Review:*** *Meltem Tulğar;* ***Writing the Article:*** *Meltem Tulğar;* ***Critical Review:*** *Meltem Tulğar;* ***References and Fundings:*** *Sibel Baştimur;* ***Materials:*** *Sibel Baştimur.*

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