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Schwannoma In Tongue

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Schwannoma originates from neuroectoderm, derived from Schwann cells of myelin coats, and it is hard, with smooth borders, encapsulated, slowly growing and generally a yellowish colo ured benign tumour. Etiology is unknown. It is most frequently observed in the head and neck. A majority of intracranial cases originate from the 8th nerve. It is very rarely found in oral cavity, especially in the tongue. Treatment is to remove the mass surgically. Since 6 cases were reported in English literature, clinical presentation and treatment of a Schwannoma case in th e tongue of an 18 year old female patient was presented.

Key words: Schwannomma, Tongue

Dilde Schwannoma

Schwannoma, sinir kılıflarının Schwan hücrelerinden kaynaklanan, nöroektodermden ori jin alan, sert, düzgün sınırlı, kapsüllü, yavaş büyüyen ve genellikle sarımtırak renkte iyi huylu bir tümördür. Etiyolojisi bilinmemektedir. En sık baş ve boyun bölgesinde görülür. İntrakranial olguların büyük bir bölümü 8. kran ial sinirden kaynaklanmaktadır. Oral kavitede ve özellikle dilde oldukça nad ir görülür. Tedavisi kitlenin cerrahi o larak çıkarılmasıdır. İngilizce literatürde dilde yerleşimli sadece 6 vaka bildirildiğinden, bu makalede 18 yaşında bir bayan hastada dilde schwannoma olgusunun kliniği ve tedavisi literatür bilgisiyle sunuldu.

Anahtar kelimeler: Schwannoma, Dil.

Schwannomma (neurilemmoma) is a benign tumour originating from neuroectoderm and derived from Schwann cell coat of motor and sensory nerves.[1] First, it was identified by Virchow in 1908.[2] Of all the Schwannoma cases, 25-40% take place in the head and the neck.[3] More than 90% of intracranial Schwannomas originate from the 8th nerve.[4] Areas, in which the head and the neck Schwannommas apart from acoustic neur inommas are localised, the neck (44%), the parotid gland (7%), the cheeks (7%), the tongue (6%), the haired skin (5%) and the nose (3%).[5] It is very rarely seen in the oral cavity.[6] Although they are found in all age groups, they are mo re often observed in the second and the third decade of life and do not have any discrimination between the sexes.[7]

Since Schwannoma in the tongue is rare, a local Schwannoma in the tongue of a femal e patient was presented in this report.

CASE

In May, 1998, an 18 years-old- female applied to out-patient clinic of the ear nos e throat department, with a mass on the left side of her tongue appeared approximately two months ago. The patient had a history of a mass, which was very small at onset and gradually became larger. Pain at the time of swallowing was described by the pa tient. At physical examination, a mass with slight pain in palpation, endurated, hard, with smoot h surface, in dimensions of 2X3 cm near the root of tongue o n the left side (Figure 1). There was no abno rmality in laboratory tests and conventional radiographs. The patient underwent an operation under general anae sthesia on May 28, 1998 and the mass was removed together with its capsule. In histopathological investigat ion of the mass, Verocay bodies consisted of nucleoli with polizad sequence in Antoni A zones (Figure 2). Therefore, it was diagnosed as Scwa nnoma Postoperatively, there was no functional deficit in the tongue.

DISCUSSION

Schwannoma, originating from neuroectoderm and derived from Schwann cells of myelincoats, is hard, with smooth borders, capsulated, slowly growing and generally a yellowish coloured benign tumour. [1] It can appear alone or is associated with Von Recklinghausen disease. [8] In general, it takes place in the head and neck, and its presence in the mouth is very rare. [1] They are rarely seen in the tongue and the base of mouth. [6] Apart from these, they could also occupy palatine, cheek mucosa, lips and gingiva, subsequently. [7]

Etiology is still unknown, and the disease is generally asymptomatic. [1] In general, it starts as a capsulated nodule and grows slowly. If it invades submucosal areas, it leads to pain and discomfort. [7, 9] Although rarely encountered, lipid accumulation in Schwannoma, cystic degeneration and hemorrhage into the cyst may be observed. Malign ant transformation is mentioned in 8 -10% of the cases. [8] Schwannoma has several histological features; two different cellular zones, such as Antoni type A and type B, are seen in histological examination. Antoni A zone has parallel formed thin reticulin fibres, fusiform shaped cells and curled nucleu s. In general, the zone includes a variety number of different cells without an apparent borders amongst their cytosols. Amongst the sheats, there are acellular eosinophilic bodies called as Verocay bodies formed by thin cytoplasmic fibres. [1,10] Antoni B zone is more regular area with less differentiated cells taken place amongst the Antoni A zones. Many findings indicate that these zones are only degenerated Antoni A zones. [9]

Lopez and his colleagues [11] reported a serial cases of nine, including three in ora l vestibules, two in the tongue, two in palatine, one in oral base and one in lower lip. Nakayama et al [6] reported one case, Rocca et al [12] one and Kroll et al [7] one case reported Schwannoma in the tongue. Additionally, Okura and his colleagues [4] reported 42 cases whose hypoglossal nerves were invaded.

It is necessary to discriminate between Schwannoma and neurofibroma. However, some authors indicate that both cases are derived from Schwann cells and peripheral connective cells. On the other hand, some other authors suggest that Schwannomas are derived from Schwan cells, and neurofibromas are derived from perineural cells. [1] Electron microscopy may help to discriminate Scwannomas from neurofibromas. [5]

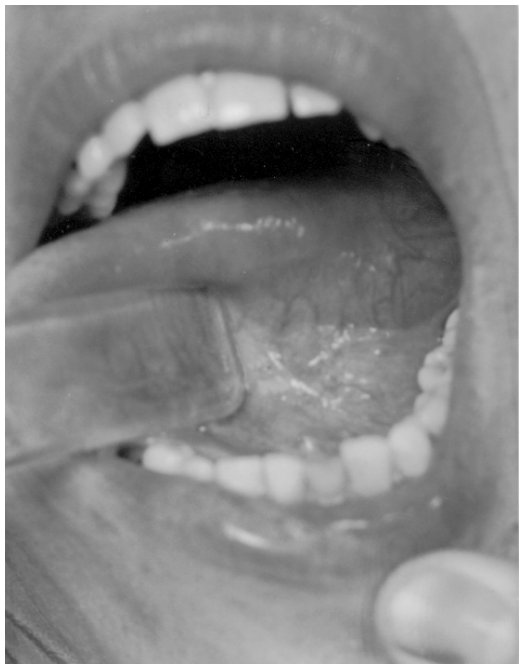

Figure 1. Schwannoma in the tongue appearance.

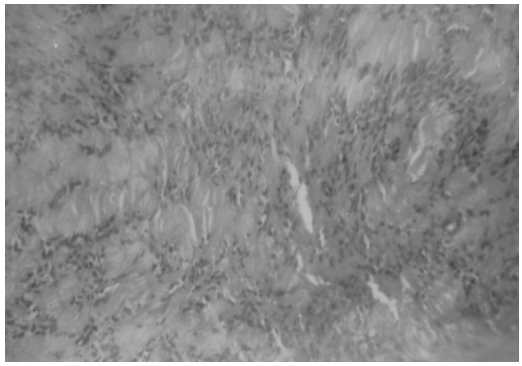

Figure 2. Histopathological investigation of the mass, Verocay bodies consisted of nucleoli with polizad sequence in Antoni A zones HEx200.

Schwannoma is diagnosed by histopathology in biopsy materials. [1, 12] Magnetic resonance imaging and computerised tomography are helpful in diagnosis. [3, 4, 13] These tumours are radioresistant. Surgical resection is only the treatment method to be chosen in all masses with marked sizes and giving symptoms. [14] Surgical removal of Schwannoma in the tongue is generally easy. Prognosis after surgical resection is good and remission is fairly rare. [15]

In the presented case, complete surgical excision of Schwannoma in the tongue is sufficient for the treatment. Remission may be possible, unless the mass is not removed completely with its capsule. Schwannoma should be considered for the differential diagnosis of hard masses with smooth surface, which is growing slowly in the tongue.

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