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CASE REPORT

Schwannoma of Tonsillolingual Sulcus: First Case Report and Review of Literature

Hitesh Verma, Arjun Dass, RPS Punia

ABSTRACT

Schwannoma is a benign, encapsulated tumor that is derived from schwann's cells. The most common site is parapharyngeal space of the neck; oropharyngeal occurrence is extremely rare. Fourteen year male boy presented with a history of difficulty in swallowing, more for solids for the last 8 months. The patient also had a change of voice for the last 5 months and was muffled in character. Examination showed single lobulated mass having smooth surface, of the size of approximately 5 × 4 cm and was arising from the tonsillolingual sulcus. The fine needle aspiration cytology from the lesion, reported to be schwannoma. The mass was excised completely under general anesthesia with the help of bipolar cautery. We report first case of schwannoma of tonsillolingual sulcus and also review the literature of the rare entity.

Keywords: Schwannoma, Tonsillolingual sulcus, Neurofibroma.

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INTRODUCTION

Nerve sheath tumors were first described in 1910 by Verocay.[1] About 25 to 45% of all neurogenic tumors occur in head and neck region and are mostly located in the parapharyngeal space.[2,3] Two types of neurogenic tumors must be distinguished: schwannoma and neurofibroma. Schwannoma emanate from perineural schwann cells and are well encapsulated, growing adjacent to parental nerve but extrinsic to nerve fascicles.[3] Neurofibromas on the other hand derived from perineural fibrocytes and are uncapsulated and are usually interwined with parental nerve fascicles.[3,4] On reviewing the literature, we could found only five reported cases of tonsillar schwannoma.[5-8] To the best of our knowledge, this will be first case of schwannoma of tonsillolingual sulcus.

CASE REPORT

Fourteen years male boy presented in ENT OPD of Government Medical College and Hospital, Sector 32, Chandigarh, with a history of difficulty in swallowing which was insidious, progressive, more for solids for the last 8 months. The patient also had a change of voice for the last 5 months and was muffled in character. There was no history of trauma or bleeding from the mouth. There was no history of respiratory difficulty. Examination of the oral cavity and oropharynx showed single lobulated mass having smooth surface, of the size of approximately 5 × 4 cm and was arising from the tonsillolingual sulcus (TL sulcus) (Figs 1 and 2).

On palpitation, it was nontender and firm in consistency. The mass was pedunculated as the patient was able to protrude the mass with the movement of tongue. The fine needle aspiration cytology from the lesion, reported to be schwannoma. After investigation, the patient was taken for further assessment and excision of the lesion under general anesthesia. The patient was placed in tonsillectomy position. The Boyle's Davis mouth gag was introduced and the mass was found to be attached to right tonsillolingual sulcus by narrow stalk. After localizing, the stalk, the mass was excised completely with the help of bipolar cautery. The histopathology report was schwannoma.

At 1 year of the follow-up, the patient was free from the disease.

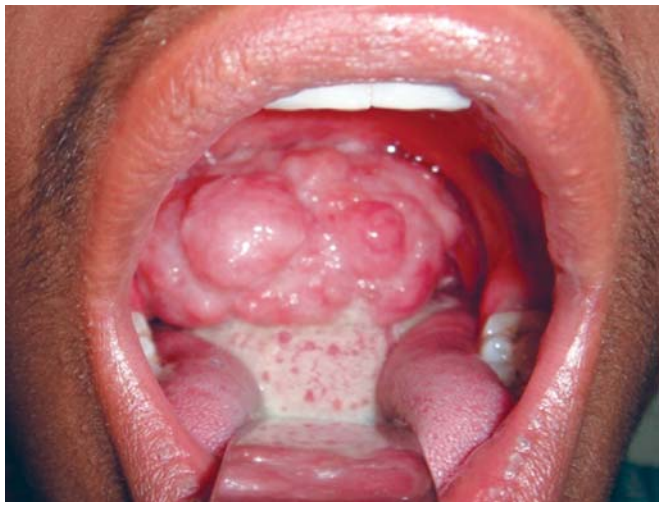

Fig. 1: Sitting position

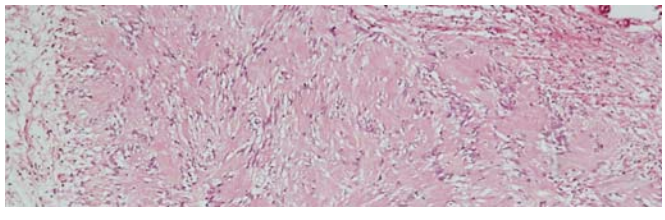

Fig. 2: Histopathological view

DISCUSSION

Schwannomas are benign slow-growing tumors that arise from the schwann cells of any peripheral, cranial or autonomic nerve sheaths in various anatomic locations. Schwannomas involving the head and neck are most commonly intracranial and usually involve the vestibular nerve. Between 25 and 45% of extracranial schwannomas occur in the head and neck region.[4] The tumor can develop anywhere from the base of the skull to the thoracic inlet but is most commonly found in the mid neck.[9]

The occurrence of schwannomas in the oropharynx is very rarely reported as an unusual cause of dysphagia, dyspnea and dysphonia, revealing the tumor.[10]

Schwannomas are usually solitary and typically manifest as a slowly enlarging painless mass. Pain and neurologic deficit are uncommon but suggestive of malignancy.[4] CT or MR imaging findings of schwannomas are often similar to those of neurofibromas and, in many cases, the two cannot be distinguished. Usually, the lesion is a large sharply demarcated mass, round or oval, isoattenuated with muscle, sometimes cystic and often heterogeneously enhancing.[11] The definitive diagnosis remains histologic.

Surgery is the treatment of choice for schwannomas of the head and neck because these tumors are usually benign, radioresistant and do not recur on long-term follow-up. Depending on the site of origin, size of tumor, these tumors can be removed by transoral, transcervical and combined approach. In this case, we removed the tumor by transoral approach.

SUMMARY

Schwannomas are benign slow-growing tumors that arise from the schwann cells. The occurrence of schwannomas in the oropharynx is very rarely reported as an unusual cause of dysphagia, dyspnea and dysphonia, revealing the tumor. On reviewing the literature, we could found only five reported cases of tonsillar schwannoma. To the best of our knowledge, this will be first case of schwannoma of tonsillolingual sulcus. Surgery is the treatment of choice for schwannomas of the head and neck because these tumors are usually benign, radioresistant. Depending on the site of origin, size of tumor, these tumors can be removed by transoral, transcervical and combined approach. In this case, we removed the tumor by transoral approach.

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REFERENCES

1. Verocay J. Zur Kenntnis der Neurofibroma. Beitr Pathol Anat 1910;48:1-69.
2. Sanghvi V, Lata M, Borges A. Lateral thyrotomy for neurilemmoma of larynx. J Laryngol Otol 1999;113(4):346-48.
3. Zabren P, Markwalder R. Schwannoma of true vocal cord. Otolaryngol Head Neck Surg 1999;121(6):837-39.
4. Kang GC, Soo KC, Lim DT. Extracranial non-vestibular head and neck schwannoma: A ten-year experience. Ann Acad Med Singapore 2007;36:233-40.
5. Naik SD, Agrawal S. Neurilemmoma of tonsil. J Indian Med Assoc 1975;65(1):17-18.
6. Lall GS, Walsh RM, Rowlands DC, Donaldson l. Schwannoma (neurilemmoma) of the tonsil. J Laryngol Otol 1999;113(6): 585-86.
7. Bildirici K, Cakli H, Kecik C, et al. Schwannoma (neurilemmoma) of the palatine tonsil. Otolaryngol Head Neck Surg 2002 Jun;126(6):693-94.
8. Anil HT, Gowda BV, Lakshmi S, Niveditha SR. Schwannoma of the palatine tonsil. J Laryngol Otol 2005;119:570-72.
9. Lusk MD, Kline DG, Garcia CA. Tumors of the brachial plexus. Neurosurgery 1987;21(4):439-53.
10. Colreavy MP, Lacy PD, Hughes J, et al. Head and neck schwannomas: A 10-year review. J Laryngol Otol 2000;114: 119-24.
11. Tzagkaroulakis A, Stivaktakis J, Nikolopoulos T, et al. Ancient schwannoma of the true vocal cord. ORL J Otorhinolaryngol Relat Spec 2003;65:310-13.

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