

CASE REPORT

TONGUE BASE SCHWANNOMA: A RARE ENTITY

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ABSTRACT: INTRODUCTION: Schwannomas are the benign tumours arising from the Schwann cells. Intraoral and pharyngeal schwannomas are rare and constitute less than 1%. **CASE REPORT:** We report a case of a 39 year old lady who presented with progressive dysphagia and dysphonia since three months. Intraoral examination showed a well-defined reddish lesion arising from the base of the tongue. She was referred to the department of radiodiagnosis for CT and MRI of the neck to know the extent of the lesion. Differential diagnosis of schwannoma and minor salivary gland tumor was given. Excision biopsy of the lesion was done and the histologic examination showed it as schwannoma. **DISCUSSION:** Schwannomas of the base of the tongue are rare and should be included in the differential diagnosis based on the imaging features and enhancement pattern. **CONCLUSION:** Imaging features, particularly MRI with contrast helps in differentiating benign from malignant lesions of the base of the tongue. Schwannomas are benign and have good prognosis as they can be excised when compared to the other intraoral malignant lesions.

KEYWORDS: Tongue base, schwannoma, MRI.

INTRODUCTION: Schwannomas are slow growing, solitary benign neoplasms that are well encapsulated soft tissue lesions arising from Schwann cells. Schwannomas originate from any nerve that contain Schwann cells, the cells which form the myelin sheath over nerve fibres.¹ Schwannoma was first reported by Verocay in 1910, who described it as neurinoma.² Schwannomas are more common in the age group of 30 to 50 years. Schwannomas in head and neck region constitute about 25% with intraoral schwannomas being less than one percent of these. [3, 4, 5, 6] Only 16 cases of tongue base schwannomas are reported in literature till now.

CASE REPORT: A 39 year old female presented with difficulty in swallowing and change in voice since three months. There was no history of pain or bleeding from the mouth.

On clinical examination, a firm reddish swelling was noted at the posterior aspect of the tongue. She was referred for CT and MRI of neck with the clinical suspicion of vascular malformation or lymphoma and to know the extent of lesion. Imaging findings are

CASE REPORT

LATERAL RADIOGRAPH:

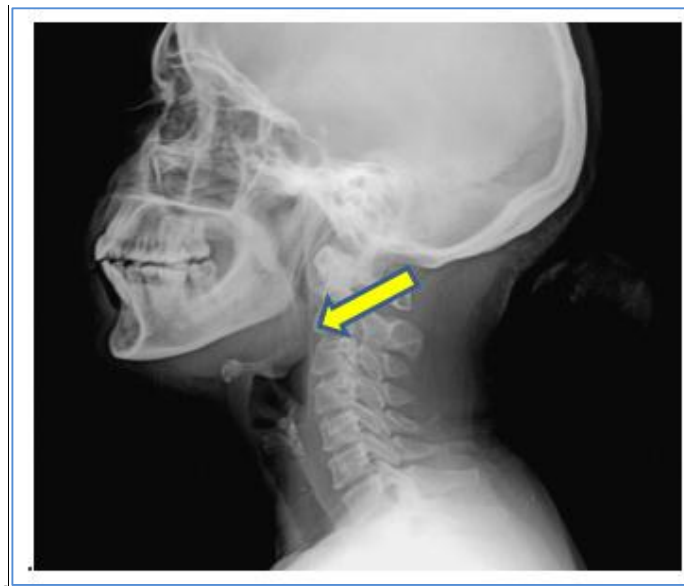


Fig. 1: Lateral radiograph of the neck showed well-defined soft tissue opacity obliterating the pharyngeal air column

ULTRASONOGRAPHY:



Fig. 2(A)

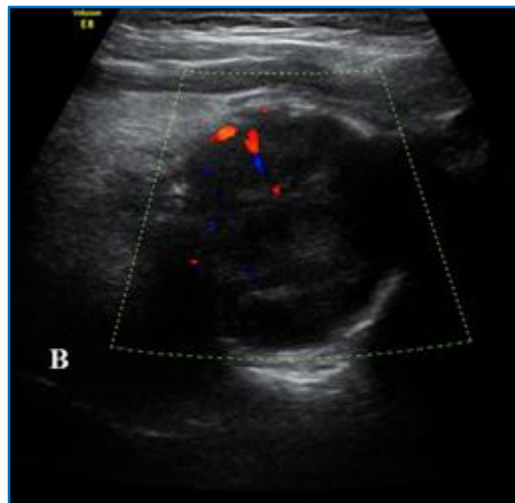


Fig. 2(B)

CASE REPORT

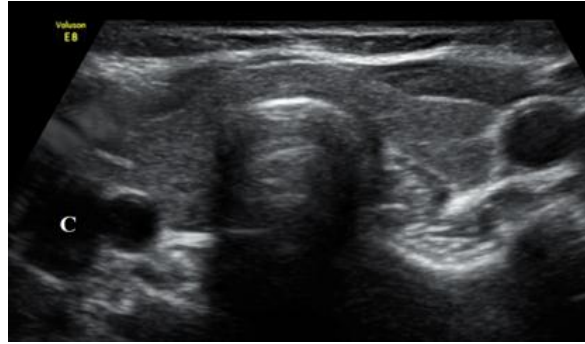


Fig. 2(C)

Fig. 2: Well-defined hypo echoic lesion in the posterior aspect of tongue (A) with vascularity on color Doppler (B). Thyroid gland is normal is size and echo texture (C).

CT:



Fig. 3(A)



Fig. 3(B)



Fig. 3(C)

CASE REPORT

Fig. 3: CT Sagittal (A), Coronal (B) & Axial (C) images - Well defined soft tissue density lesion attached to the posterior aspect of the tongue base. Lesion is obliterating the hypopharyngeal air column.

MRI:

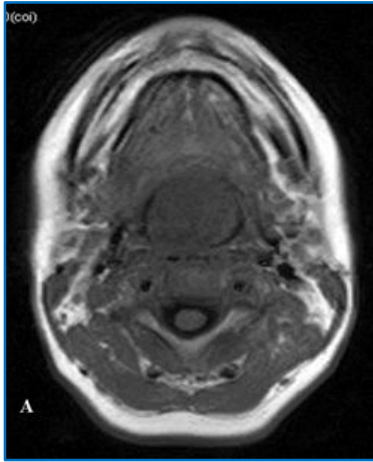


Fig. 4(A)

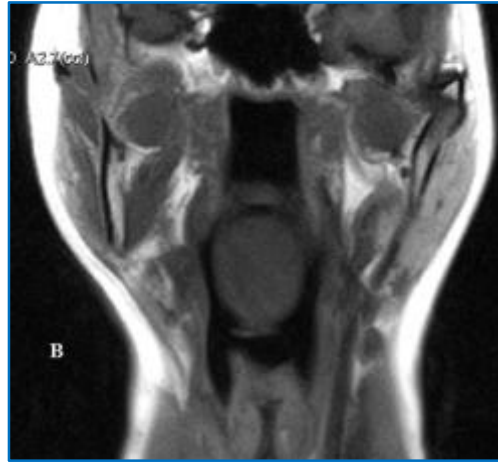


Fig. 4(B)

Fig. 4: Axial (A) & Coronal (B) T1WI – well defined hypo intense lesion from the posterior aspect of the base of the tongue.

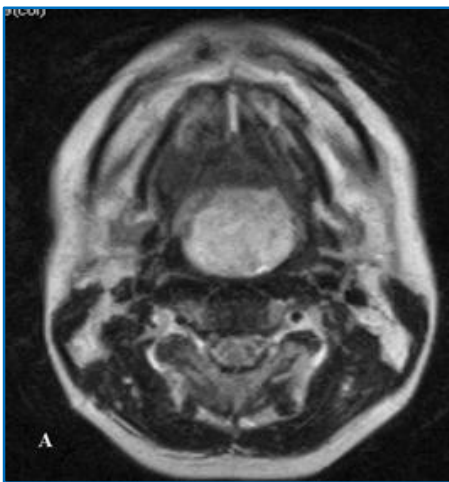


Fig. 5(A)

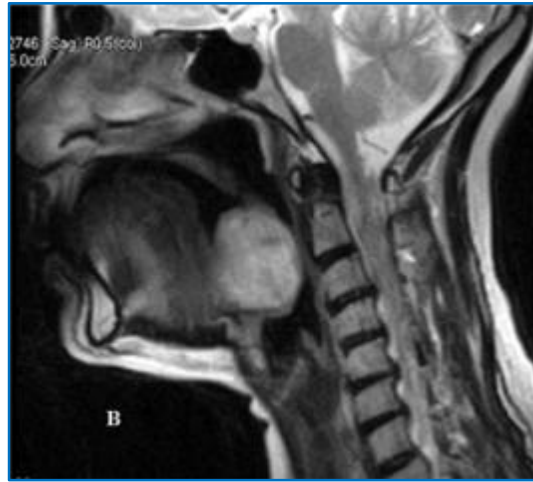


Fig. 5(B)

Fig. 5: Axial (A) & Sagittal (B) T2WI – well defined hyper intense lesion from the posterior aspect of the base of the tongue.

CASE REPORT

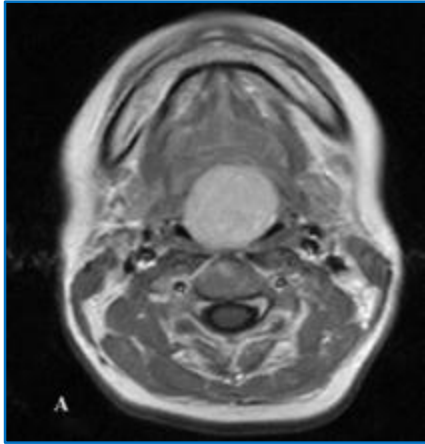


Fig. 6(A)

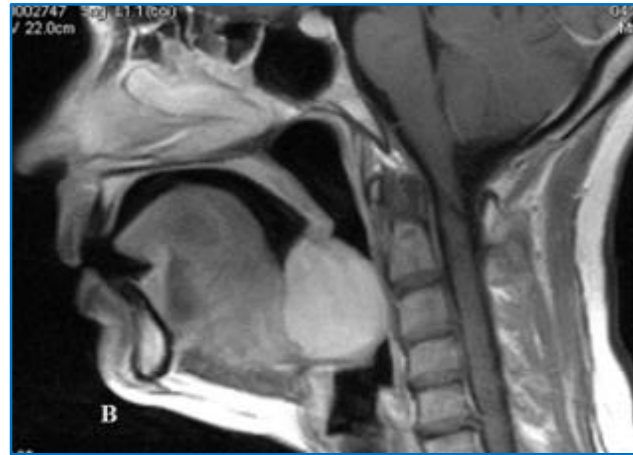


Fig. 6(B)

Fig. 6: Axial (A) & Sagittal (B) T1C+: The lesion enhances brilliantly on post contrast.

DISCUSSION: Schwannomas are unencapsulated, benign, slow growing tumors. The most common presentation of schwannoma is acoustic schwannoma as a part of NF-2. Head and neck schwannomas do occur but tongue base schwannomas are rare. Tongue base schwannomas present with difficulty in swallowing, dysphonia and regurgitation.

The differential diagnoses of a well-defined tumor in the tongue base are mesenchymal tumor, squamous cell carcinoma and vascular malformation.

In the present case, well defined lesion was noted in the posterior aspect of the base of the tongue as confirmed on CT and USG. Internal vascularity was noted on colour Doppler. The lesion showed hypo intensity on T1, hyper intensity on T2 and intense enhancement on post contrast images. Imaging characteristics on MRI favoured the diagnosis of schwannoma.⁷

Local excision is the treatment of choice in tongue base schwannomas.⁸ Radiotherapy is not done to schwannomas as they are not radiosensitive.⁹ In this present case, the lesion was completely excised and sent for histopathological examination.

Histopathology showed alternate areas of hypo and hypercellularity with verrucae bodies. Immunochemistry was S100 positive which confirmed the lesion as schwannoma.

CONCLUSION: Schwannoma of the base of tongue is very rare. It should be included in the differential diagnosis based on imaging features and enhancement pattern on post contrast. Imaging features, particularly MRI with contrast helps in differentiating benign from malignant lesions of the base of the tongue. Schwannomas are benign and have good prognosis as they can be excised when compared to the other intraoral malignant lesions.

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CASE REPORT

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