

## SCHWANNOMA OF THE THYROID GLAND – A CASE REPORT

V. Subramaniam<sup>1</sup>, TV. Adarsha<sup>1</sup>, S. Khandige<sup>2</sup>

1. Department of Otorhinolaryngology Head and Neck Surgery, Yenepoya Medical College, Deralakatte, Mangalore, Karnataka, India.
2. Department of Pathology, Yenepoya Medical College, Deralakatte, Mangalore, Karnataka, India.

**SCHWANNOMA OF THE THYROID GLAND – A CASE REPORT (Abstract):** The thyroid gland is an infrequent site for the occurrence of a Schwannoma. These tumours most often mimic a thyroid nodule. A case of Schwannoma of the thyroid gland which was diagnosed on histopathological examination after a hemithyroidectomy is reported here.

**KEY WORDS:** THYROID NODULE, SCHWANNOMA, HEMITHYROIDECTOMY

Correspondence to: Dr. Vijayalakshmi Subramaniam, Department of Otorhinolaryngology Head and Neck Surgery, Yenepoya Medical College, Deralakatte, Mangalore – 575 018, Karnataka, India. email: vijisubbu@gmail.com. Tel: 91-9886 273 009, Off: 0824-2204668, Fax: 0824-2204667\*.

### INTRODUCTION

Schwannomas are benign neoplasms of the peripheral nerves originating in the Schwann cells which occur in the head and neck region only in 25% of cases. Primary non epithelial tumours of the thyroid gland are rare. Schwannoma of the thyroid is extremely rare. Only 19 cases have been described in English literature [1-6]. A case of schwannoma of thyroid gland which simulated a thyroid nodule is reported here. Its clinical and pathological features are discussed.

### CASE REPORT

A 30 year old female presented with a history of swelling in front of the neck which was small to start with and gradually progressed in size over the last 1 year. The patient was otherwise asymptomatic.

Examination revealed a diffuse swelling in front of the neck measuring 6 x 7 cm extending from the midline to the anterior border of right sternocleidomastoid muscle. The swelling moved with deglutition and involved the right lobe and isthmus of thyroid gland. It was firm in consistency, had a smooth surface and was non-tender. Fine Needle Aspiration Cytology (FNAC) of the swelling was reported as colloid goiter. Thyroid function tests were normal. Ultrasonography of neck showed a large cystic lesion in the right lobe of thyroid gland measuring 3.3 x 2.5 x 3.5 cm on the lateral aspect. The lesion showed few septations and floating internal echoes.

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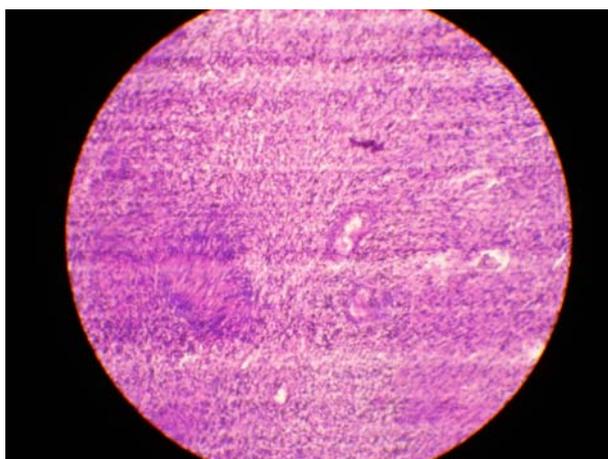
The lesion was just abutting the right carotid artery. This was reported as cystic degeneration of a thyroid nodule.

A right hemithyroidectomy was performed under general anaesthesia (Fig. 1). A cyst measuring 4cm x 2.5cm x 3cm was seen over the right lobe of the thyroid gland. The post operative course was uneventful.



**Fig 1 Right hemithyroidectomy specimen**

Histopathological examination of specimen showed a well encapsulated tumour, with cells arranged in bundles with nuclear pallsading (Verocay bodies) – Antoni A pattern. In areas, tumour tissue was hypocellular with collagen and spindle cells. Dilated thick walled blood vessels and areas of haemorrhage were seen –Antoni B pattern. Nerve bundles were seen in the capsule. Normal thyroid tissue was seen outside the capsule. These findings were typical of a schwannoma (Fig. 2).



**Fig. 2 Histopathological exam**  
schwannoma with Antoni A and B pattern  
(col HE, x 10)

## DISCUSSION

Neurogenic tumours rarely occur in the thyroid gland. The first case of neurilemmoma (schwannoma) involving the thyroid gland was reported by Delaney and Fry in 1964 [5]. Until 2005, only 19 cases of Schwannoma of thyroid had been described in English language literature [1-6], most of which simulated a thyroid nodule [6-11].

The patient reported here presented with a diffuse swelling of the right lobe of thyroid gland which was firm, smooth, painless and mobile on deglutition. Ultrasonographic evaluation was reported as a cystic degeneration in a thyroid nodule. FNAC of the swelling showed a colloid goiter. Though the patient was asymptomatic, it was decided to carry out a right hemithyroidectomy due to the increase in the size of the swelling. A cyst measuring 4 x 2.5 x 3 cm was seen over the right lobe of gland. Histopathological examination of the excised specimen revealed a schwannoma of thyroid with Antoni A and B pattern.

This case is being reported to highlight the fact that it is extremely difficult to differentiate Schwannoma thyroid from a cystic thyroid nodule as clinical and sonological characteristics can be similar in the two. FNAC has draw backs in terms of accuracy as described by Zbaren et all [12] and does not constitute an effective means of diagnosis. In this case too, FNAC revealed only a colloid goiter. Sonographically too, it was reported as a cystic degeneration in a thyroid nodule. Only the histopathological examination of the excised specimen was diagnostic.

## CONCLUSION

Schwannomas of the thyroid are extremely rare. They are often mistaken for a thyroid nodule. It is difficult to make diagnosis before surgery and the only treatment for the disease is surgical removal.

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