

## SCHAWANOMA DISGUIISING AS A SOLITARY THYROID NODULE

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### ABSTRACT

Schawannoma is a benign tumor arising from schawann's cells. Schawannoma is arising from nerve tissue in central and peripheral nervous system is not uncommon, but is rarely found in body organs like pancreas, parotid gland or clinically simulate some other organ pathology. A case of Schawannoma clinically presenting as a solitary thyroid nodule is presented in this case report.

**KEY WORDS:** Schawannoma, Benign neoplasm, Thyroid nodule.

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### INTRODUCTION

Nerve sheath tumors were first described in 1910 by Verocay.<sup>1</sup> Schawanoma are benign, encapsulated, sub mucosal, neural sheath tumors derived from Schawann's cells. Schawannoma's are found anywhere in the body where schawann's cell are found but they are more common in brain where they constitute about 8% of all intracranial tumors.<sup>2</sup> We are presenting a rare case of benign Schawannoma mimicking as a left sided solitary thyroid nodule.

**Case Report:** A 19 years old girl presented with nine month history of discrete swelling over front of neck, left side. She also had complains of difficulty in swallowing and breathing.

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Swelling was gradually increasing in size. It was painful in the beginning which used to settle down with analgesics. Patient also gave history of increased appetite, heat intolerance, weight loss and palpitation off and on. Clinical examination revealed 7×5 cm sized, non tender swelling involving left thyroid lobe, moving with swallowing, firm in consistency. Cervical lymph nodes were not palpable. Her thyroid function tests were normal and fine needle aspiration cytology showed scanty follicular cells. Thyroid scan showed cold nodule in left thyroid lobe. With diagnosis of cold thyroid nodule, she was prepared for surgery. At operation thyroid was found to be normal and swelling was lying behind the left thyroid lobe adherent with caratoid sheath, giving an impression of solitary thyroid nodule (Fig-1). Excision of swelling was done carefully and wound closed. Histopath report revealed Schawannoma probably arising from branch of Vagus nerve.

### DISCUSSION

Schawannoma's are more common in females and usually occurs in midlife.<sup>2</sup> They are generally solitary and can occur along any somatic or sympathetic nerve in the body except the olfactory and optic nerves, which lack schawann's cell sheath and which are part of the central nervous system.<sup>3</sup> They often arise from the 8<sup>th</sup> cranial nerve especially vestibular

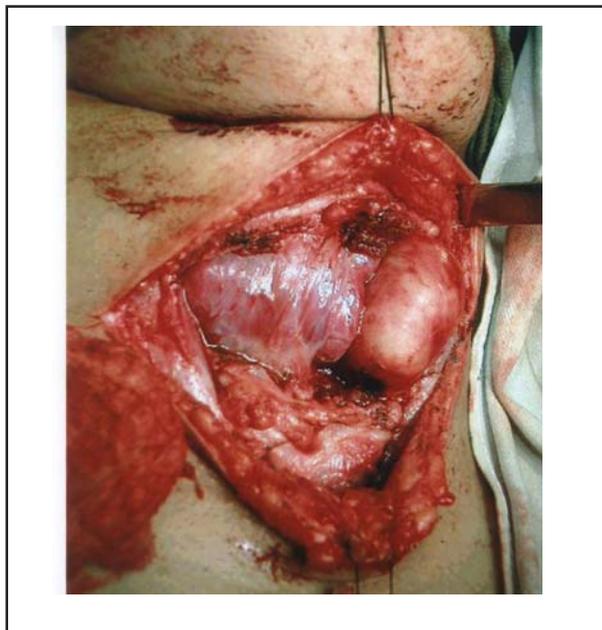


Fig-1: A view of Schwannoma before removal

part of the acoustic nerve is involved most commonly (acoustic neuroma).<sup>4,5</sup> They are slow growing, smooth surfaced and usually asymptomatic until symptoms are produced by pressure on adjacent structures.<sup>2</sup> Symptoms they produce depend upon the site of involvement. Histologically, Schwannoma's are encapsulated lesions that are characterized by cellular (Antoni A) and edematous (Antoni B) regions in varying proportions.<sup>2,5</sup> Cellular areas that display palisading of nuclei and pooling of cytoplasm (Verocay's bodies) are pathognomonic of Schwannoma. The Antoni B pattern is less cellular, lacks palisades and is more prone to degeneration and cyst formation. Immunohistochemistry of Schwannoma demonstrates S-100 positivity.<sup>6</sup>

Approximately 25% of Schwannoma arise in head and neck area.<sup>1</sup> Some Schwannoma's have been associated with Von Recklinghausen's disease. In these cases cutaneous and visceral nodules and café au lait spots were also observed.<sup>3</sup> Surgery is the treatment of choice for Schwannoma's of the head and neck because these tumors are usually benign, radio resistant and don't reoccur on long term follow up.

Although Schwannoma is not an uncommon tumor but it is rare to find at some places in body where clinical presentation may disguise with some other pathology. Only a few cases of Schwannoma in the pancreas, parotid gland are reported in literature so far. The tumor may present as a cyst that grossly mimics the cystic lesion of these glands and leads to wrong diagnosis and mismanagement. Schwannoma disguising as a solitary thyroid nodule is a rare entity and no case was found on review of literature.

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