



PRIMARY NEURILEMMOMA OF THE THYROID GLAND: A CASE REPORT

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ABSTRACT

Primary nonepithelial tumors of the thyroid gland are rare. It represents less than 1% of all thyroid tumors¹. They can include lymphomas, leiomyomas, teratomas, lipomas, hemangiomas, and neurilemmomas. We present the case of a middle aged woman with a neurilemmoma of her left thyroid lobe.

KEYWORDS : Landmine, Toxic gas, Metal detector.

CASE REPORT

A 47-year-old woman presented with a left neck mass that had gradually increased in size over the past few months. She had no history of any dysphagia, odynophagia, hoarseness, or neck pain. Physical examination showed a mobile, nontender, firm, approximately 2.8×2.0 cm mass at the level of the left inferior pole of the thyroid gland. There was no other lymphadenopathy.

Laboratory studies showed a normal serum thyroid-stimulating hormone (TSH), triiodothyronine (T3), and thyroxine (T4) levels. Fine-needle aspiration showed inflammatory cells. An USG showed a 2×1.5 cm well delineated solid nodule of predominantly hypoechoic structure in left inferior thyroid lobe. An iodine 123 thyroid uptake scan was performed, which showed a "cold" area in the left inferior thyroid lobe.

The patient underwent a left thyroid lobectomy without complications. A 1.8×1.2 cm mass was found in the left inferior pole of the thyroid gland. Gross pathological examination revealed a nodular gray mass with a slightly cystic appearance. Histological examination showed an encapsulated mass with areas of interlacing fascicles of spindle cells with palisading nuclei consistent with an Antoni A type neurilemmoma (Fig 1). The patient has done well after her operation and has had no recurrence of the tumor.

DISCUSSION

Neurilemmomas are tumors arising from Schwann cells in the neural sheath of autonomic, cranial, or peripheral nerves. Nearly half appear in the head and neck region². Neurilemmomas of the thyroid gland are rare. The first detailed report of a neurilemmoma in the thyroid gland was given by Delaney and Fry in 1964³.

Neurilemmomas are pathologically classified into 2 types—Antoni A and Antoni B. The Antoni A type has palisading, compact, spindle cells, whereas Antoni B type shows a more sparsely cellular pattern with a myxoid stroma. Both types can be found in a single tumor. The majority of the reported cases had Antoni A type neurilemmomas. Neurilemmomas are generally slow growing tumors and produce most of their symptoms by compressing vital structures. Malignant degeneration is very rare presentation⁴.

The differential diagnosis of neurilemmomas in the thyroid gland includes other benign and malignant thyroid masses along with tumors arising from other structures in this region (parathyroids,

larynx, lymph nodes, and brachial cleft cysts). Although fine-needle aspiration is commonly used in the workup of thyroid masses, it was not helpful in our case.

Surgical excision is the recommended treatment, although radiation therapy has been used for neurilemmomas in other areas of the head and neck⁵. If the diagnosis is known preoperatively, enucleation is all that is required. However, the diagnosis is difficult to make and, therefore, a lobectomy is most often performed.

CONCLUSION

Our report of a neurilemmoma in the thyroid gland provides additional elaboration on the clinical, radiologic, and pathologic findings of these rare tumors. Preoperative diagnosis is often difficult, and treatment generally involves a thyroid lobectomy. When evaluating "cold" nodules of the thyroid gland, neurogenic tumors should be considered.

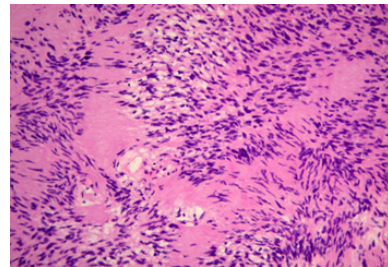


Fig 1

REFERENCES

1. Milliron RR, Cassisi NJ: Management of Head and Neck Cancer (ed 2). Philadelphia, PA, Lippincott, 1994, pp 785-810
2. Mabanta SR, Bhuatti JA, Friedman WA, et al: Linear accelerator radiosurgery for non-acoustic schwannomas. *Int J Radiat Oncol Biol Phys* 43:545-548, 1999
3. Delaney WE, Fry KE: Neurilemmoma of the thyroid gland. *Ann Surg* 160:1014-1016, 1964
4. Calcaterra TC, Wang MB, Sercarz JA: Unusual tumors, in Myers EN, Suen JY (eds): *Cancer of the Head and Neck* (ed 3). Philadelphia, PA, Saunders, 1996
5. Kondziolka D, Lundsford LD, McLaughlin MR, et al: Long-term outcomes after radiosurgery for acoustic neuromas. *N Engl J Med* 339:1426-1433, 1998