



A RARE CASE REPORT OF SCHWANNOMA OF ESOPHAGUS

Surgery

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ABSTRACT

Benign neoplasms of esophagus are uncommon and esophageal schwannomas are very rare. We report a case of 60 year old female presenting with swelling on the right side of neck extending below the sternum. CT scan showed a well-defined swelling in the tracheoesophageal groove abutting the thyroid gland and upper gastrointestinal endoscopy was normal. Intraoperatively, the tumor was found to arise from the esophagus and was removed in toto. Post-operative histopathology revealed features suggestive of schwannoma.

KEYWORDS

Oesophageal Schwannoma, Benign Tumours Of Oesophagus

INTRODUCTION

Benign tumors of esophagus account for 2% of all Esophageal tumors^{1,2}. Esophageal leiomyomas are most common benign tumor and schwannoma of esophagus is exceedingly rare. We report a rare case report of esophageal schwannoma that was initially evaluated as a thyroid swelling.

Case Report:

A 60-year-old male presented with swelling in right lateral side of the neck and difficulty in breathing on exertion and lying down. There was no history of voice change, symptoms suggestive of hypo or hyperthyroidism. Blood investigations showed a free T3 level of 2.9 pg/ml (normal range -1.9 to 5.4 pg/ml), free T4 was 1.4 ng/dl (0.8 to 1.5 ng/dl), TSH 2.7 microIU/ml (normal range 0.2 to 5.0 2.7 microIU/ml).

CECT neck and chest (Figure 1) showed a well-defined heterodense lesion in right tracheoesophageal groove of size 5.4 x 5.3x 3 cm extending for 1cm retrosternally. The lesion was noted abutting the right lobe of thyroid and the esophagus with proximal dilatation of the esophagus with loss of fat plane with the trachea. Upper gastrointestinal endoscopy and fiber optic bronchoscopy was normal.

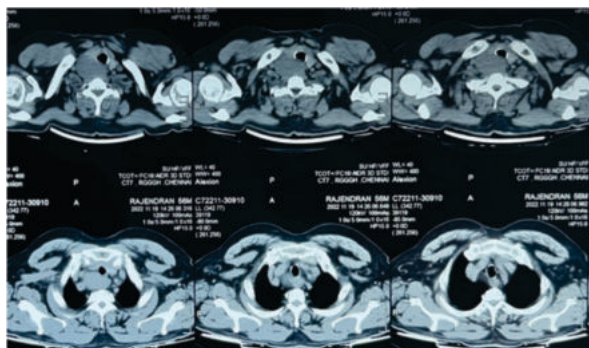


Figure 1

The patient was taken for surgery and intraoperatively there was a tumor of size around 5x 5cm arising from the anteromedial border of esophagus, adherent to the thyroid gland. During Initial lateral dissection, the lesion could not be mobilized from the esophagus. Thyroid isthmus was cut after which tumor was found separately from the thyroid gland. Outer longitudinal layer of esophagus was incised, and tumor removed from the esophagus in toto (Figure 2). The mucosa was intact, and the muscular defect was subsequently closed in two layers interrupted sutures

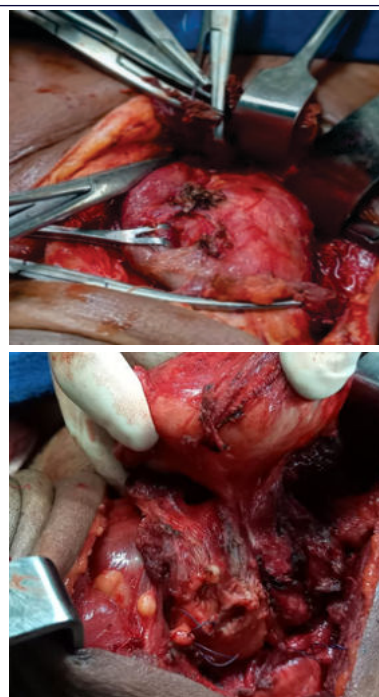
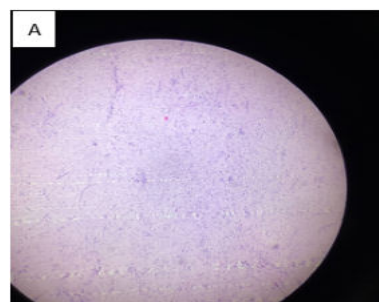


Figure 2

Postoperative period was uneventful, and patient discharged on postoperative day 6 HPE showed spindle cells in fascicles with few foci of palisading arrangements suggestive of schwannoma (figure 3). The resected margins were negative of the tumor.



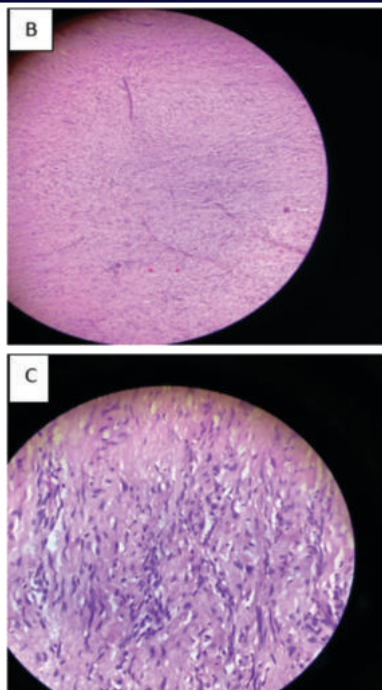


Figure 3. A) focus showing hypocellular and hypercellular areas. B) Fascicles of spindle cells with wavy nuclei with tapered ends. C) Spindle cells with wavy ends

DISCUSSION:

In 1956, Sanchez reported the first case of schwannoma esophagus^{1,3}. Schwannoma arising from gastrointestinal tract is uncommon and mostly occur in stomach or colon¹. Esophageal schwannoma are very rare tumors and between 1989 and 2018, a total of 120 case reports were reported (PubMed (NCBI) database)⁴

These are more common in the female^{4,5} and in fourth to sixth decade⁴. Majority are asymptomatic and those who are symptomatic present commonly with dysphagia^{4,6}. Esophageal obstruction due to a schwannoma has not been previously reported, with most cases describing tracheal compression⁶. Preoperative diagnosis is very difficult, and majority are diagnosed after resection of the tumor^{5,7}.

CT or MRI do not confirm the diagnosis and 18-fluorodeoxyglucose uptake in positron emission tomography have been reported⁸. Endoscopic ultrasound-guided fine needle aspiration (EUS-FNA) can be used to help establish the pathologic diagnosis, but this technique has limited accuracy.⁹

In general, histological features of schwannoma include spindle-shaped tumor cells arranged in a palisading pattern or with loose cellularity in a reticular array. These tumors are well-defined and confined to the muscularis propria.¹

Immunohistochemical staining for S100 protein, αSMA, CD34 and CD117 are also useful^{1,4}. Smooth muscle markers such as actin, desmin are typically absent⁶.

Smaller lesions may be treated with enucleation while larger lesions need esophagectomy^{1,4,6}. Prognosis depends on the size of the tumor and degree of mitosis⁴. Malignant transformation is rare, and recurrence has been observed in incompletely removed tumors.^{4,7}

CONCLUSIONS

We report a case of Esophageal initially evaluated as swelling arising from the thyroid gland. Preoperative diagnosis is essential, however is difficult. The tumor was successfully treated by enucleation and diagnosis was made after pathological examination.

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