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## EXOPHYTIC THYROID NODULE

### ABSTRACT

An exophytic tissue grows outside towards the surface of an organ and the connecting tissue has similar functional features as the mother organ. A case of exophytic thyroid tissue in the submandibular area connected to the normal thyroid by a fibrous stalk has been described. However, the fibrous connecting band did not contain functional thyroid tissue, and hence questions the true exophytic nature of the swelling. We present a rare case of subplatysmal solitary thyroid nodule in lower anterior neck connected to the superior pole of right thyroid lobe by functional thyroid tissue.

**Keywords:** Exophytic, Thyroid

## INTRODUCTION

Ectopic thyroid is a developmental anomaly of thyroid. It refers to thyroid tissue location other than its usual site anterior to trachea in the lower neck.<sup>1</sup> Ectopic tissue may occur with or without the normal thyroid gland. Often located in midline between foramen caecum and mediastinum, these tissues may be lateral in location too. The commonest location is lingual. In contrast, exophytic thyroid tissue grows out from the thyroid surface and is connected via functional thyroid tissue to the normal gland.<sup>2</sup> We have reported a case of 42 year woman diagnosed with exophytic thyroid nodule in lower anterior neck.

## CASE REPORT

A 42 years female presented with non-painful, progressively increasing swelling in midline of lower anterior neck for two years. On examination, the swelling was around 2.5x2.5 cm in size, bilobed, firm, and moved with deglutition as well as protrusion of tongue. Ultrasonography revealed a hypoechoic, heterogeneous, solid lesion in subcutaneous plane, in midline, inferior to hyoid and abutting thyroid isthmus. Thyroid function test was normal. Thyroid scan revealed normal uptake by the thyroid gland. Fine needle aspiration cytology revealed benign thyroid aspirate. She underwent excision of the mass via trans-cervical approach. On elevation of subplatysmal flaps, the swelling was appreciated lying superficial to the strap muscles and connected to the upper pole of right lobe of thyroid by a fleshy

stalk (Figures 1 and 2). Histopathology revealed colloid goitre (Figure 3). She remained euthyroid at 3 month postoperatively.

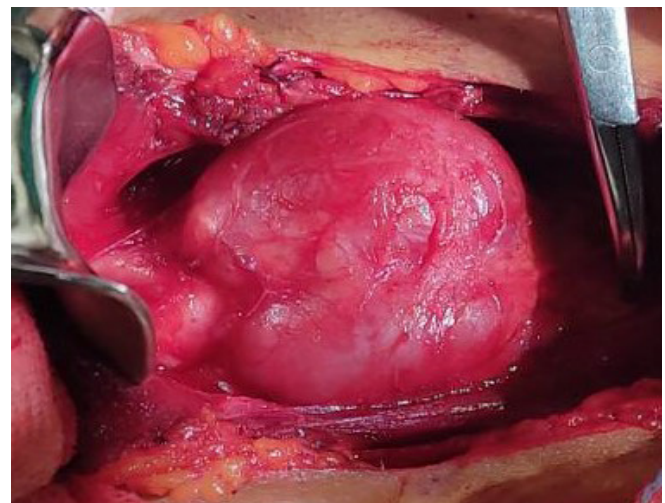


Fig. 1 Bilobed thyroid nodule intraoperatively

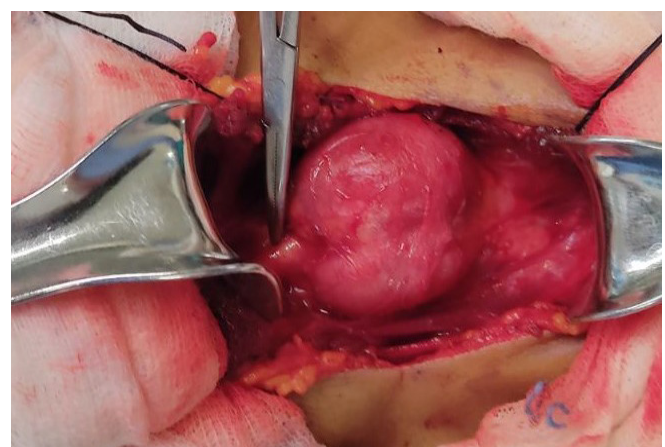


Fig. 2: Nodule attached to upper pole of right lobe of thyroid via stalk (black arrow)

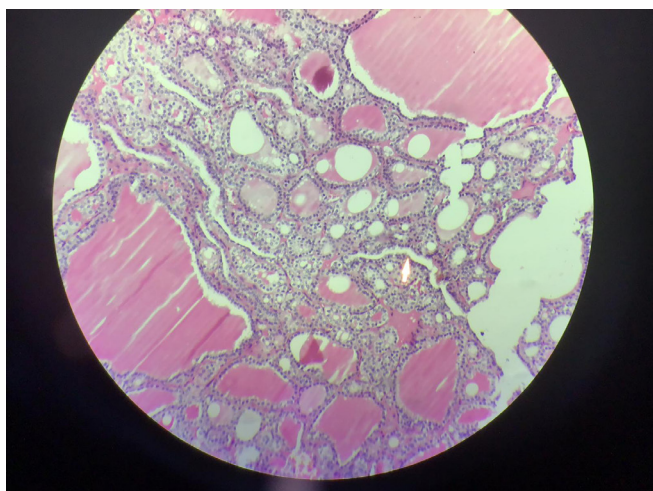


Fig.3 Histopathological examination

## DISCUSSION

Ectopic thyroid is often reported in literature as a form of thyroid dysgenesis. Exophytic thyroid nodule has different definitions in literature. It refers to a nodule that sticks out of the normal thyroid outline. It is also defined as a nodule that makes an acute angle with the adjacent thyroid capsule.<sup>3</sup> These definitions make it a commonly reported occurrence. These nodules are reported to have higher rates of malignancy compared to their non-exophytic counterparts.<sup>4</sup>

It is also defined as a tissue growing outside towards the surface of the gland, and the connecting tissue has functional thyroid gland. No literature has reported exophytic thyroid nodule as per this definition. Keles et al. described thyroid mass in right submandibular region which was attached to normally located thyroid by a fibrous band that didn't contain functional thyroid tissue.<sup>2</sup> The nonfunctional status of the fibrous band questioned the true exophytic nature of the mass. Also, the mass failed to fit in the definition of ectopic thyroid tissue as ectopic tissues are not connected to the normally located gland. They defined surgical resection and pathological assessment as optimal treatment.

In our case, the infrahyoid, midline location of the mass with movement on deglutition and protrusion of tongue made thyroglossal duct cyst as the likely diagnosis. However, the solid nature of the lesion didn't support it. We only performed the excision of the mass, without removal of normal thyroid gland as the definitive procedure. Histopathological confirmation of benign nature of the mass further ascertained our treatment

plan.

## CONCLUSION

Exophytic thyroid nodule may pose a diagnostic challenge. Surgical removal is the recommended treatment.

## REFERENCES

1. Chawla M, Kumar R, Malhotra A. Dual ectopic thyroid: Case series and review of the literature. *Clin Nucl Med* 2007;32(1):1-5
2. Keles E, Ozkara S, Karlidag T, Ozercan IH. Thyroid tissue connected to normally located thyroid gland : Ectopic or Exophytic? *Case Rep Otolaryngol* 2012;2012:681823
3. Kim DW, Jung SJ, Baek HJ. Computed tomography features of benign and malignant solid thyroid nodules. *Acta Radiol* 2015;56(110):1196-1202
4. Dellal FD, Baser H, Arpaci D, Tam AA, Ozdemir D, Kilicarslan A, Dumlu EG, Ersoy R, Cakir B. Rate of malignancy in exophytic thyroid nodules. *Iran J Radiol* 2017;14(2):e41141