

THYROIDECTOMY IN THYROID HORMONE RESISTANCE??

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ABSTRACT

INTRODUCTION

Resistance to thyroid hormone is a rare genetic disorder with impaired responsiveness of target tissues to the action of thyroid hormone (TH) associated with an increase in thyroid hormone levels, with non-suppressed thyroid-stimulating hormone (TSH) levels. We report a case of thyroid hormone resistance.

CASE REPORT

55 yr old gentleman, on tab carbimazole, presented with thyrotoxic symptoms with no eye symptoms and increase in size of neck swelling. The patient has similar symptoms for 10 years and has been on treatment since then with good compliance. He was toxic on examination and had a goitre 15 X 10 cm in size, nodular, non-tender, firm in consistency with retrosternal extension. Investigations showed an elevated TSH, T4, T3, free T4 and free T3. Ultrasound neck showed multinodular goitre. FNAC showed colloid goitre. α subunit, SHBG levels and MRI pituitary were normal suggestive of thyroid hormone resistance. Genetic analysis could not be done due to financial constraints. Due to the presence of large goitre with compressive symptoms, total thyroidectomy was done and the histopathology

showed multinodular goitre. Postoperatively patient had remission of symptoms but continued to have non-suppressible TSH requiring a high dosage of levothyroxine supplementation (1.8 mcg/kg/day) with borderline elevated FT4.

DISCUSSION

Thyroid hormone resistance is a rare entity with the usual management being symptomatic. Goitre is the most common presentation occurring in 65-95% of patients which is usually detected on ultrasonography. However, in our patient, the goitre was large enough to cause compressive symptoms and thus total thyroidectomy was advised. This case highlights the rare presentation of thyroid hormone resistance with large goitre.

CONCLUSION

Thyroid hormone resistance is an extremely uncommon condition which may rarely require thyroidectomy as a treatment in cases of large compressive goitres.