

CONCLUSION

This patient was primarily investigated for glioma, but the histopathology report changed the course of investigation and treatment. Histologically, the oncocytic cell is a follicular “derived” thyroid cell which exhibits abundant granular eosinophilic cytoplasm and is positive for TTF1 and thyroglobulin immunostain. Clinical presentation varies from capsular to vascular and/or distant lymph node invasion, and metastatic spread. In this case, we describe the challenges encountered in diagnosing HTC. Brain metastasis of HTC is rare.

The unique presentation as a primary brain tumour with no thyroid nodule or neck swelling delayed the diagnosis. The prognosis of such cases is worse in a high-grade and poorly differentiated disease.

EP_A144**IODINE-131 RESISTANCE IN A CASE OF TOXIC ADENOMA REQUIRING MULTIPLE COURSES OF RAI-131**

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INTRODUCTION/BACKGROUND

Hyperthyroidism is a state of hyperactive thyroid gland secreting excessive thyroid hormone causing a constellation of symptoms to multiple organs and systems. Hyperthyroidism can be caused by an autoimmune condition (Graves’ disease), inflammation of the thyroid (thyroiditis), or due to functioning thyroid nodules (hot nodule or toxic multinodular goitre).

We report a case of toxic adenoma, who received Iodine-131 four times with a cumulative dose of 69 mCi; however, persistent hyperthyroidism required additional treatment with ATD. Subsequently, she underwent left hemithyroidectomy.

CASE

A 29-year-old female was referred to the nuclear department for radioactive iodine-131 (RAI-131) therapy. She received her first RAI-131 with 15 mCi in September 2020. Due to persistent hyperthyroidism, she received another RAI-131 with 15 mCi in April 2021. Her third RAI-131 with 21 mCi done in January 2022 and fourth RAI-131 with 18 mCi was done in June 2022 due to persistent hyperthyroidism requiring ATD. She had Tc-99 m pertechnetate thyroid uptake scan done with scan findings suggestive of toxic multinodular goitre in left thyroid lobe. She was planned for another RAI-131, however she refused.

Left hemithyroidectomy done in September 2023 with HPE reported as nodular hyperplasia with dominant nodule and cystic degeneration. She developed transient hypothyroidism after surgery requiring levothyroxine and subsequently euthyroidism without any medication.

CONCLUSION

RAI-131 is relatively safe and easy to administer making it the treatment of choice for many causes of hyperthyroidism. Around 10% of patients would require subsequent dose of RAI-131. Failure of RAI-131 for treatment of hyperthyroid is rare, mainly due to inadequate preparation. Some patients have delayed response to RAI-131, up to years after iodine treatment.

EP_A145**NAVIGATING THE CHALLENGES OF UNCONTROLLED THYROTOXICOSIS**

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INTRODUCTION/BACKGROUND

Thyrotoxicosis is a condition characterized by the excessive production of thyroid hormones. Commonly presented as Graves’ disease, other aetiology includes toxic multinodular goitre or subacute thyroiditis. Therapeutic approaches depend on the aetiology which includes anti-thyroid medications, radioactive iodine, or surgical intervention. We highlight 2 cases with different aetiologies of thyrotoxicosis that remained uncontrolled despite medical therapy and necessitated surgical intervention.

CASE 1

23-year-old female with diffuse goitre that was progressively increasing in size since the age of 15. She presented with classic thyrotoxicosis symptoms. She was confirmed to have Graves’ disease and was treated with carbimazole therapy. However, she remained uncontrolled after 2 years despite high dose carbimazole therapy (90 mg/day), lithium (600 mg/day), prednisolone (20 mg/day) and cholestyramine. She finally relented to surgical intervention as her definitive treatment. Her perioperative optimization was equally challenging and the addition of Lugol’s iodine a week prior to surgery brought her free T4 levels below 20 pmol/L. Through multidisciplinary collaboration between endocrinologists, surgeons and anaesthetists, she had a successful total thyroidectomy.