TSHOMA: A RARE PITUITARY TUMOR

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ABSTRACT

INTRODUCTION: TSH-secreting pituitary adenomas (TSHoma) or thyrotropinoma are rare pituitary tumors that secrete an abnormal Thyroid Stimulating Hormone (TSH) which constitutes up to 1% - 2% of all pituitary adenomas. Patients often remain misdiagnosed for years. This case is reported to emphasize the importance of diagnosing it early and accurately to ensure timely management and relief of symptoms before perpetual damage is done.

CASE DESCRIPTION: We report a case of a 29 years old patient from Peshawar, Pakistan who was referred to Endocrine Unit Hayatabad Medical Complex Peshawar - Pakistan for the review of his persistently raised TSH despite optimal dosing of thyroxine for 2 years. He was initially diagnosed and treated for hyperthyroidism with Neomercazole and then with radioactive iodine (RAI). Post-RAI he developed hypothyroidism and was subsequently treated with optimal doses of thyroxine. Despite optimal doses of thyroxine, TSH remains elevated. Previous thyroid function tests also showed persistently raised T3, T4, and raised TSH. Patient was clinically thyrotoxic. MRI findings reveals macro adenoma and was resected by neurosurgeon and advised Endocrine follow up visit in OPD after surgery.

CONCLUSION: TSHoma is highly under diagnosed. It is important to consider the pitfalls in diagnosis where normal or low alpha sub unit levels could lead to dubious differentials. The use of advance technology i.e. functional MRI scans to confirm diagnosis should be carried out early on leading to timely treatment options including radiotherapy and surgery.

KEY WORDS: TSH-secreting pituitary adenomas (Non-MeSH); TSHoma (Non-MeSH); Thyrotropinoma (Non-MeSH); Thyrotropin (MeSH); Iodine Radioisotopes (MeSH); Pituitary macroadenoma (Non-MeSH); Pituitary Neoplasms (MeSH); Thyroid Hormones (MeSH); Triiodothyronine (MeSH); Thyroxine (MeSH).


CONFLICT OF INTEREST

Authors declared no conflict of interest

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