Association of TSH secreting adenoma and meningioma: a case report

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Introduction:

TSH-secreting pituitary adenomas are rare pituitary functioning tumors accounting for less than 2% of the pituitary adenomas. Their association to meningiomas is a very rare condition.

Case report:

We report a case of 55 -year-old woman who had multinodular goiter with mild symptoms of hyperthyroidism.

Blood tests showed inappropriate secretion of TSH .

Magnetic resonance imaging (MRI) : a pituitary tumor with maximum diameter of 13 mm

Visual field : normal.

Ttt: Tumor was extirpated through transsphenoidal route.

Evolution:
*After operation fT4 levels were still high
*MRI showed persistence of residual tumor and a right parasagittal meningioma was detected.
Treatment options are discussed.

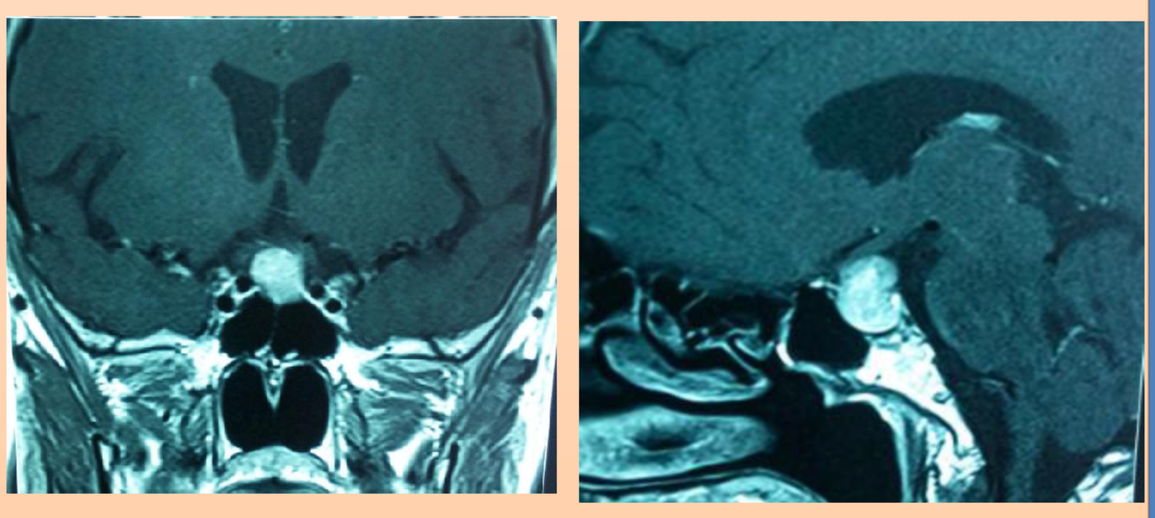

Fig1: Pituitary MRI before operation

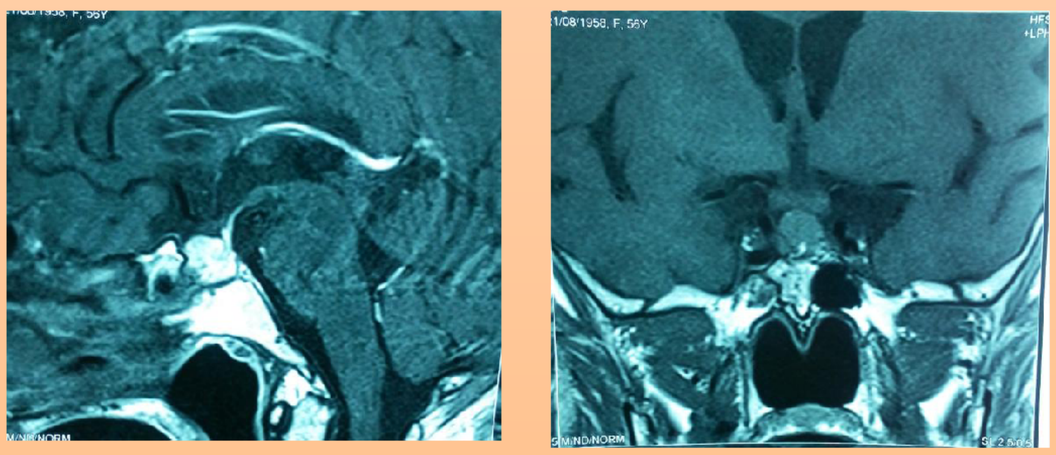

Fig2: Pituitary MRI after operation

Discussion:

*Meningiomas are the most common nonglial intracranial tumor, accounting for about 15% of all intracranial tumors. These lesions are usually located in the lateral ventricles, and their presence in the fourth ventricle is rare.(1)
•TSH secreting adenoma are very rare, accounting for 0.3 % of all pituitary tumors.(2)
•The association of meningiomas and pituitary tumors is very rare. If patients who have undergone previous radiation therapy are excluded from consideration, the presence of these two types of tumors in the same patient becomes even rarer.(3)
*To our knowledge, the association of a meningioma and a TSH secreting adenoma in a patient without previous radiation therapy had never been reported.
*Diagnostic consideration should probably include metastatic germ cell tumors and ependymal tumors. Hormone levels have been suggested to have a role in either inhibiting or stimulating the growth of meningiomas. The presence of prolactin receptors in most meningiomas is established, as is the role of prolactin in stimulating the growth of these lesions.

Conclusion:

Association of meningioma to TSH secreting adenoma is rare but can make difficult the treatment of persistence adenoma. Radiotherapy as well as somatostatin receptors agonists can stimulate the growth of meningioma.

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