(A Health Awareness Initiative)

NEURO NEWSLINE

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PITUITARY TUMOURS (ADENOMA) .... The concepts !

Most pituitary tumours are pituitary adenomas, and it is a benign slow growing tumour that arises from the cells of the pituitary gland. The pituitary gland is the controller of all the hormones in our body and it is situated at the base of the brain behind our eyes and nose. These tumours represent almost 10% to 15% of all intracranial tumours. It is most commonly seen in the 3rd and 4th decades of life and affects both sexes equally. The annual incidence of pituitary neoplasms varies from 1 - 7 cases per 100,000 population in the United States. Pituitary tumours usually present with endocrinological disturbances or due to the mass effect of its growth. Tumours that exceed 10 mm size are called macroadenomas and those less than 10 mm are called microadenomas.

SYMPTOMS & SIGNS

In general, the pituitary macroadenomas lead to defective vision, which is due to the compression of the visual pathways in the brain namely the optic nerve/chiasm. Various types of headaches are caused by pituitary adenomas, sometimes it mimics a migraine or a 'cluster headache' (a stabbing kind of a headache). At times it can produce severe headache due to raised intracranial pressure due a rapidly growing mass or due to a 'bleed' within the tumour (known as 'apoplexy'). It can cause amenorrhea (menstrual irregularities), apathy, emotional instability and easy irritability. Some of them have 'acromegaly' characterised by bossing of the head, enlarged nose and tongue with spade-like hands. Certain patients have 'Cushingoid' features with weight gain, stretch marks and excessive growth of facial hair (hirsutism). Patients do have severe thirst with excessive production of urine leading to severe dehydration (known as diabetes insipidus).

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DIAGNOSIS & TREATMENT

Radiographic imaging of the brain is mandatory using CT/MRI scan if a patient is suspected to have any of the above mentioned symptoms. Hormone profile that includes thyroid function tests, cortisol, prolactin, growth hormone, LH & FSH are done when it is deemed necessary. Pituitary microadenomas (<10 mm) are treated conservatively (medicines) especially if they are hormone secreting. Pituitary adenomas that secrete hormones, but not responding to medical treatment go in for surgery. Those patients with pituitary macroadenomas (>10 mm) with symptoms of visual deterioration or raised intracranial pressure are advised surgical excision. Patients who present with atypical features clinically and radiologically go for surgery/biopsy to rule out the possibility of tuberculosis or carcinoma, though it's rare. Endoscopic/ microneurosurgical excision of the tumours done transnasally is an accepted form of treatment worldwide. Radiation therapy may be needed in certain cases where there is invasion of blood vessels by the tumour which is not surgically amenable.