



A Case Report of Optic Nerve Meningioma in A 55 Yr Old Female.

KEYWORDS

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ABSTRACT A case of a 55-year old female with left-sided proptosis is presented. Proptosis of the left eye was initially observed 2 years ago. Ophthalmological clinical examination as well as laboratory tests including the thyroid hormone tests revealed normal levels and pale optic nerve disc. CT study showed a mass in the left retro orbital space suggestive of an optic nerve meningioma.

Case presentation:-

A 55 year old female presented to the outpatient department of ophthalmology of D.Y Patil Hospital with complaints of lid edema, diminution of vision, and proptosis of the left eye since 2 years. The proptosis was gradual progressive and axial in nature. Diminution of vision was progressive and painless. Proptosis corresponded with the diminution of vision. The left eye examination showed there was lid edema with axial proptosis of the eye. The conjunctiva was chemosed, rest of the anterior segment was normal. The extra ocular movements were normal in right eye and in the left eye the movements were absent in all direction. The vision of the patient was 6/12 partial with pinhole it was 6/6 and counting fingers 1/2meters with pinhole there was no improvement in left eye. The proptosis was 30mm in left eye. Fundus examination revealed a pale optic disc suggestive of optic atrophy. The patient was sent for CT scan and blood investigations including thyroid hormones level. The thyroid hormone levels and other blood parameters were normal. The CT scan study showed a mass in the retro orbital space of the left eye. The mass measuring 4X4.6X4.2 (ML X AP X SI) was soft tissue density involving the proximal attachments of left extra ocular muscles, the optic nerve and with foci of calcification suggestive of optic nerve meningioma. The patient was referred to neuro surgeon. The tumor was excised and sent for histopathology reporting which confirmed the diagnosis of optic nerve meningioma.



Fig no.2. Showing axial proptosis of the left eye with chemosis and lid edema

While the right eye is abducted note the left eye is in primary gaze.

(The extra ocular movements were normal in right eye but the left eye movements were lost)



Fig 3. Showing loss of adduction in the left eye.



Fig no.1 showing proptosis of the left eye with lid edema.



Fig 4. CT SCAN Showing mass in the left eye retro orbital space,

The mass appears to involve the orbital part optic nerve.



Fig 5. The CT Scan showing the expansion and thinning of the lateral and medial orbital walls.

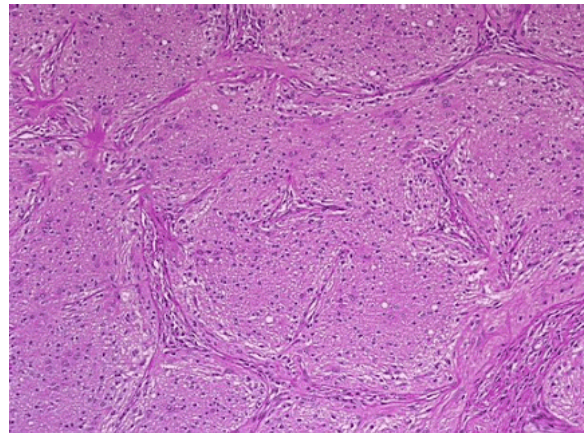


Fig no. 6. Histology slide of the tissue confirming the diagnosis of the optic nerve meningioma

CASE DISCUSSION:-

Optic nerve sheath meningioma (ONSM) is a term applied to primary and secondary meningioma of the optic nerve. ONSM occurs more commonly in middle aged women. It is also seen commonly in older adults (mean age group of 44.5 years). It is also rarely seen in children. Primary ONSMs account for approximately one third of primary optic nerve tumors and 5% to 10% of orbital tumors [1,2]. Primary ONSM represents a neoplasia of meningothelial cap cells of arachnoid villi and can develop anywhere along the course of the optic nerve. Lesions may be unilateral, bilateral, or multifocal. These tumours are more common in Neurofibromatosis type 2. Incidence of Neurofibromatosis NF 2 is 9 % in cases of optic nerve sheath meningioma. Calcification is also a common characteristic of meningioma. Clinical manifestations include ipsilateral visual loss, color vision disturbance, visual field defect, proptosis, optic disc oedema and subsequent optic atrophy and motility disturbance. ONSM's do not improve without treatment.

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