CASE REPORT

CRANIOPHARYNGIOMA: A CASE REPORT

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ABSTRACT: Craniopharyngioma is a type of brain tumor derived from pituitary gland embryonic tissue. It is also known as Rathkes pouch tumor. It is usually a suprasellar neoplasm with variable ocular presentation. We report an interesting case of a 30 year male presented to us with craniopharyngioma with optic atrophy and hemianopia. MRI brain showed presence of craniopharyngioma, survival rate are usually good with early detection and proper management.

KEYWORDS: Craniopharyngioma, MRI brain, Suprasellar neoplasm, Hemianopia, Rathkes Pouch.

INTRODUCTION: Craniopharyngioma is a type of brain tumor derived from pituitary gland embryonic tissue.¹

It is also known as Rathke's pouch tumor. It is a rare, usually suprasellar neoplasm.² It is a slow growing tumor which usually results in a bitemporal hemianopia due to compression of optic chiasma.

EPIDEMIOLOGY: Prevalence of craniopharyngioma varies world over, more common in USA, Japan, Africa and India. Its prevalence is approximately 2/100, 000 in America³. Overall it constitutes about 1-3% of intracranial tumors and 13% of suprasellar tumors. It is a common tumor seen in children, but adult form is also seen, slight male predominance exists in all groups.

ETIOLOGY: Two theories have been proposed for development of craniopharyngioma i.e.:

1. Embryogenetic theory in children
2. Metaplastic theory in adults

Beta catenine has been found to be as a marker for development of craniopharyngioma

CASE REPORT: A 30 year old male, non-vegetarian by diet presented to us with Gradual diminution of vision in both the eyes since 1 year Frontal headache since 1 month.

On Examination: Patient had best corrected visual acuity of Perception of light in right eye and 6/24 in left eye.

Right Eye showed fixed and semidilated pupil, not reacting to light along with corneal opacity.

Intra Ocular Pressure of Right Eye was 16 mm [NCT] and left eye was: 15 mm [NCT].

Fundus picture showed presence of primary optic atrophy in Right Eye and partial optic atrophy in left eye [See Fig. 1]

Visual field of the Left Eye showed temporal hemianopia [See fig. 2]

MRI of brain showed a heterogeneous solid cystic mass, suprasellar mass lesion approximately 4.7 x 3.7x3.1 cm in size [See fig. 3] separate from pituitary gland and compressing the optic nerve suggestive of craniopharyngioma. The patient was referred to higher center for further management.

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DISCUSSION: Craniopharyngioma's are slow growing tumors which if detected early have a good prognosis. The survival rate in USA were approximately 86% at 2 years and 80% at 5 years after diagnosis, so early detection and proper management plays an important role in patient's survival. Subfrontal or trans-sphenoidal excision is usually recommended as surgical approach. Adjuvant radiotherapy and chemotherapy may be used if total surgical removal is not possible.

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Figure: 1

Figure: 2

Figure: 3

Figure: 4

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