# INTRAORBITAL CAVERNOUS HAEMANGIOMA (CHM)

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#### Abstract

This is an interesting and rare case report of right intraorbital cavernous haemangioma near optic nerve of a 12 years boy who was hospitalized for right sided uniocular moderate axial proptosis and headache without any impairment of vision. Computed Tomographic (CT) scan showed fusiform enlargement of around right optic nerve just behind the eye ball. The mass was removed by right fronto-orbito-zygomatotomy incision and diagnosed post-operatively as intraorbital cavernous haemangioma (CHM).

Key words: Intraorbital cavernous haemangioma.

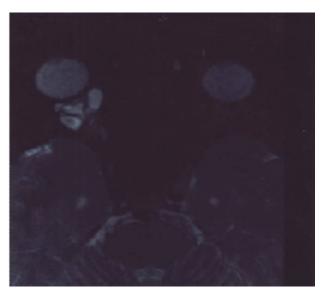
### Case Report

On 20th May 2009, a 12-year-boy (Fig-1) was admitted to Combined Military Hospital (CMH) Rangpur with 03 months history of proptosis in right eye, headache and

Fig-1: Photograph of the patient

vertigo. The proptosis was gradually increasing which was axial in nature without any symptom of diplopia, restricted eye movement and impairment of vision.

Family history, personal history and drug history were not relevent. On local examination he was found forward bulging of right eye with mild conjunctival chemosis. Ocular mobility was not restricted, There was no defecit of vision. Compression test was negative. Pupil was reacting normaly. Fundus was found normal. All relevant investigations were done. T<sub>3</sub>,T<sub>4</sub> ,TSH, CBC was within normal limit. CT scan and MRI of brain and orbit showed fuciform enlargment around right optic nerve (Fig-2). FNAC showed moderate cellular materials containing ganglion cells having abundant cytoplasm with relatively large nuclei and small cells with hyperchromatic nuclei without any malignant cells. The case transfered to India for better management where extensive surgery was done by right frontoorbitozygomatotomy. Total mass removed and diagnosed post-operatively as right sided intraorbital cavernous haemangioma(CHM). After operative treatment, the patient was symptomless having slight impairment of vision to 6/9 in right eye without any sign of proptosis, optic nerve atrophy and restriction of ocular mobility.



**Fig-2:** Photograph of the MRI of orbit showing retrobulbar enlargement near right optic nerve.

## Discussion

Cavernous haemangiomas are rare benign vascular malformation and can occur anywhere in the brain,

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spinal cord and orbit but has been reported most frequently at subcortical sites on the frontal and temporal lobes or in intraorbital region<sup>1</sup>. The etiology of CHM may be spontaneous, syndrome or familial<sup>1,2</sup>. Intraorbital cavernous haemangioma near optic nerve head is a rare, congenital, unilateral, vascular hamartoma3. It is histologically benign vascular malformation composed of capillary tangles<sup>4</sup>. It is associated with proptosis or distortion of vision. These lesions vary in size, have smooth contours and are noninvasive. The lesions are well defined with internal spaces giving rise to a charecterstic picture like round or oval mulberry coloured lesion. It is usually situated within the muscle cone, often in association with a muscle. When interfering with visual function or causing marked proptosis, a complete surgical excision is carried out<sup>5</sup>. CHM effects 0.5% of the population with only a small fraction of these having optochiasmal CHM6. Clinical presentation of CHM is determined by location. CHM has a different menifestation, most commonly episodic acute visual disturbance which may or may not improve<sup>7</sup>. But it may present chronically with progressive visual loss, headache and with sign of raised intracranial pressure (ICP) and psychiatric disturbance though uncommon but depend on size and location<sup>8</sup>. The treatment of intraorbital CHM is surgical. Simple decompressive surgery for the patient presenting with acute symptom but endoscopic associated surgery may

have a role in the management of the acutely presenting patient by endoscopically adept surgeon<sup>9</sup>. The Case reported here was a intraorbital CHM near optic nerve with the classic clinical presentation of proptosis and radiological findings of fusiform lesion near optic nerve. Surgical management was done by fronto-orbitogygomatic incision on 31 July 2009.

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