A RARE CASE OF CAVERNOUS HEMANGIOMA (CHCS) OF CAVERNOUS SINUS: CASE REPORT AND REVIEW OF LITERATURE

K. Nischal[1], *Asadulla Baig*[2], *Rakesh N. Reddy*[3], *Gourav Prasad*[4]

[1]*Professor, Department of Surgery, Sri Devaraj Urs Medical College, Tamaka, Kolar.*
[2]*Assistant Professor, Department of Surgery, Sri Devaraj Urs Medical College, Tamaka, Kolar.*
[3]*Assistant Professor, Department of Surgery, Sri Devaraj Urs Medical College, Tamaka, Kolar.*
[4]*Assistant Professor, Department of Surgery, Sri Devaraj Urs Medical College, Tamaka, Kolar.*

ABSTRACT

Cavernous haemangioma cavernous sinus is rare vascular malformations with incidence less than 1 %. They are very difficult to be differentiated and misdiagnosed as meningioma. CHCS has a high mortality and morbidity. Surgical excision is the treatment of choice but is associated with many complications due to high vascularity of the tumour as well as the location of the tumour. MRI is the gold standard diagnostic investigation of choice. Here we report a rare case of cavernous haemangioma of cavernous sinus with satisfactory surgical output at a rural setup.

KEYWORDS

Cavernous Sinus, Haemangioma, Cranial Tumour.

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CASE REPORT

A middle age female patient presented with the history of progressive headache, vomiting, diminished vision in left eye and diplopia since 4 months. On examination both pupils were equal and reactive to light, left eye vision perception of light present, left 6th nerve palsy with mild left eye proptosis.

MRI brain done showed heterogeneous enhancing lesion in left middle cranial fossa base extending into suprasellar region? Meningioma. Left pterional craniotomy and tumour debulking was done under GA. Intraoperative extra-axial tumour with well-defined capsule attached to the whole of the middle cranial fossa base noted.

Tumour was highly vascular and was sent for histopathological examination. Postoperatively patient recovered well. Her vision showed slight improvement. Post-operative CT scan brain showed a small residual lesion in the left middle cranial fossa base. Immuno histochemistry examination of the tumour reported as CHCS. During 1 year follow up there was no new focal neurological deficits.

DISCUSSION

CHCS is rare entity. Usually seen in both sexes in but women tend to be affected more at fifth to sixth decade of life. Cavernous haemangioma tumour are very vascular in nature. Perioperative mortality is around 10 to 14 %.[1]

The usual symptoms are proptosis, diplopia, and decreased visual acuity. The symptoms are commonly seen if the tumour grows in size and compresses the adjacent neurovascular bundle.[2]

Our case here had diplopia and progressive diminishing vision in left eye. These symptoms can last from weeks to years before the patient present to OPD.

The gold standard for the diagnosis is MRI brain. These tumours have a pseudocapsule due to which they are easily misdiagnosed as meningioma. On MRI they appear as well demarcated hypo intense lesion on T1 weighted sequences and irregular hyper intense on T2 weighted images.[3] These tumours must be distinguished from meningioma before surgery as they are very vascular and perioperative bleeding tendencies and mortality is high. Calcification is very rare in these tumors.[4]

Complete surgical excision is the treatment of choice for these tumours, but the complete removal of the tumour may not be possible due to its high vascular nature and the proximity to cranial nerves like oculomotor, trigeminal and abducent nerve. [3,5] Complete excision of the tumour without any cranial nerve damage is rarely reported in literature.

Postoperative radiotherapy is advised for the residual tumour. Regular follow up with MRI should be done in case of residual tumors.[6]

In conclusion, these highly vascular haemangiomas must be differentiated from meningiomas before surgery and managed with care intraoperative due to its high vascular nature. Surgery may be associated with neurological deficits due to its proximity to the neurovascular bundle i.e., the cranial nerves. Surgery should be followed with adjuvant radiotherapy for the residual tumour.

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Corresponding Author:
Dr. K. Nischal,
Professor, Department of Surgery,
Sri Devaraj Urs Medical College, Kolar.
E-mail: knischal697@gmail.com

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