

LETTER TO EDITOR

Fenestrated optic nerve in craniopharyngioma

Sir,

Fenestrated optic nerve (nervus opticus fissus) has been described *de novo* or in association with ruptured aneurysms of the anterior circulation. Five mechanisms have been described- a penetrating embryonic artery with aneurysm,^[1,2] stream of blood splitting optic nerve during SAH subsequently allowing ingrowth of aneurysm,^[3] aggressive unruptured aneurysm,^[4] osseous trabeculae^[5] (developmental) and *de novo*.^[6,7]

This 10-year-old child was diagnosed to have sellar, suprasellar craniopharyngioma and was operated with right fronto-temporal craniotomy and excision. There was a tumor bulging from the sella lifting the chiasm and the optic nerves. Following intratumoral decompression the left optic nerve was found to be split with the medial portion of left optic nerve thinner than the lateral with a distinct arachnoid layer [Figure 1]. The chiasm was thinned out due to chronic



Figure 1: Subfrontal view showing bilateral optic nerves with split left optic nerve and opened capsule of craniopharyngioma

compression by the tumor. There were no arterial loops/aneurysms or osseous bridges separating the two roots.

To the best of our knowledge, this is the first reported case in the literature of a craniopharyngioma associated with a split optic nerve.

**Alugolu Rajesh, Dumpa Jagadeeswara Reddy,
Suchanda Bhattacharjee**

Department of Neurosurgery, Nizam's Institute of Medical Sciences, Punjagutta, Hyderabad, Andhra Pradesh, India

Address for correspondence:

Dr. Alugolu Rajesh,

Department of Neurosurgery, Nizam's Institute of Medical Sciences, Punjagutta, Hyderabad, Andhra Pradesh, India.
E-mail: drarajesh1306@gmail.com

References

1. Jea A, Baskaya MK, Morcos JJ. Penetration of the optic nerve by an internal carotid artery-ophthalmic artery aneurysm: Case report and literature review. *Neurosurgery* 2003;53:996-1000.
2. Kanamaru K, Ishida F, Taki W. Splitting and penetration of the optic nerve by an aneurysm arising from the anterior wall of internal carotid artery: Case report. *J Neurol Neurosurg Psychiatry* 2001;71:525-7.
3. Date I, Akioka T, Ohmoto T. Penetration of the optic chiasm by a ruptured anterior communicating artery aneurysm. Case report. *J Neurosurg* 1977;87:324-6.
4. Fujita A, Tamaki N, Yasuo K. Complete penetration of the optic chiasm by an unruptured aneurysm of the ophthalmic segment: Case report. *Surg Neurol* 2002;57:130-4.
5. Choudhry R, Anand M, Choudhry S, Tuli A, Meenakshi A, Kalra A. Morphologic and imaging studies of duplicate optic canals in dry adult human skulls. *Surg Radiol Anat* 1999;21:201-5.
6. House PA, Couldwell WT. *De novo* fenestration of the optic nerve. Case illustration. *J Neurosurg* 2005;102:390.
7. Lang J. On an intracranially divided optic nerve (N. opticus fissus). *Acta Neurochir (Wien)* 1990;106:170-3.

Access this article online

Quick Response Code:



Website:

www.asianjns.org

DOI:

10.4103/1793-5482.145317