Optochiasmatic cavernous malformation: a rare cause of acute vision loss

Malformação cavernosa óptico-quiasmática: uma causa rara de perda de visão aguda

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A 63-year-old woman experienced the sudden onset of left retro-orbital pain and left visual disturbance. Neurological examination revealed decreased left visual acuity. Magnetic resonance imaging revealed a mass with mixed signal intensity at the left optic nerve and optic chiasm (Figure). Left frontotemporal craniotomy was performed using the pterional approach, and histological examination of the specimens confirmed cavernous

malformation. Postoperatively, the patient's left visual acuity improved slightly, but the visual field defect was unchanged.

Cavernous malformations of the optic chiasm are unusual lesions. The presenting symptoms range from progressive vision loss or pituitary disturbances to chiasmal apoplexy syndrome. Symptomatic cavernous malformations of the optic chiasm are generally treated surgically^{1,2}.

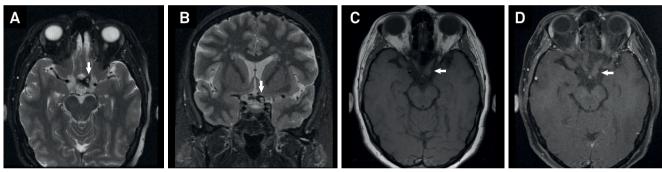


Figure. MRI, STIR (A,B), and T1-weighted images before (C) and after (D) gadolinium administration, showing the optochiasmatic cavernous malformation (white arrow) surrounded by a hemosiderin ring with no gadolinium enhancement. MRI: magnetic resonance imaging; STIR: short tau inversion recovery.

References

- Alafaci C, Grasso G, Granata F, Cutugno M, Marino D, Salpietro FM et al. Cavernous malformation of the optic chiasm: an uncommon location. Surg Neurol Int. 2015;6:60. https://doi.org/10.4103/2152-7806.155256
- Liu JK, Lu Y, Raslan AM, Gultekin SH, Delashaw JB Jr. Cavernous malformations of the optic pathway and hypothalamus: analysis of 65 cases in the literature. Neurosurg Focus. 2010;29(3):E17. https://doi.org/10.3171/2010.5.FOCUS10129

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