



Images

Acute visual deterioration and headaches in a patient with suprasellar lesion: Answer

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1. Answer

D. Optic tract cavernoma

2. Discussion

The patient underwent surgery through a left pterional craniotomy, and the intraoperative findings revealed a cavernoma in the left optic chiasm extending forward into the left optic nerve and posteriorly to the optic tract. (Fig. 3).

Cavernous malformation (CM) is a common intracranial vascular lesion and accounts for 10 – 15% [1,2] of the cases. The most common location is supratentorial (80%), brainstem (15%), and

spinal cord (5%). Optic nerve CMs are very rare, with only 70 cases reported in the literature [3–6].

The relative risk of hemorrhage from asymptomatic supratentorial cavernomas is 0.7 to 3.1% per year [7]. Management of asymptomatic CM within the optic apparatus is problematic and requires consideration of the relative risk of hemorrhage with devastating visual loss consequences against those of surgery. In contrast, the risk increases in patients with previous hemorrhages up to 3.8% to 22.9% [7]. Since a small hemorrhage from a cavernoma located in the anterior optic apparatus could have catastrophic consequences, we recommend resection of the lesion in cases with radiological or clinical evidence of hemorrhage [8], as subsequent hemorrhage risk with visual loss is increased (Figs. 1 and 2).

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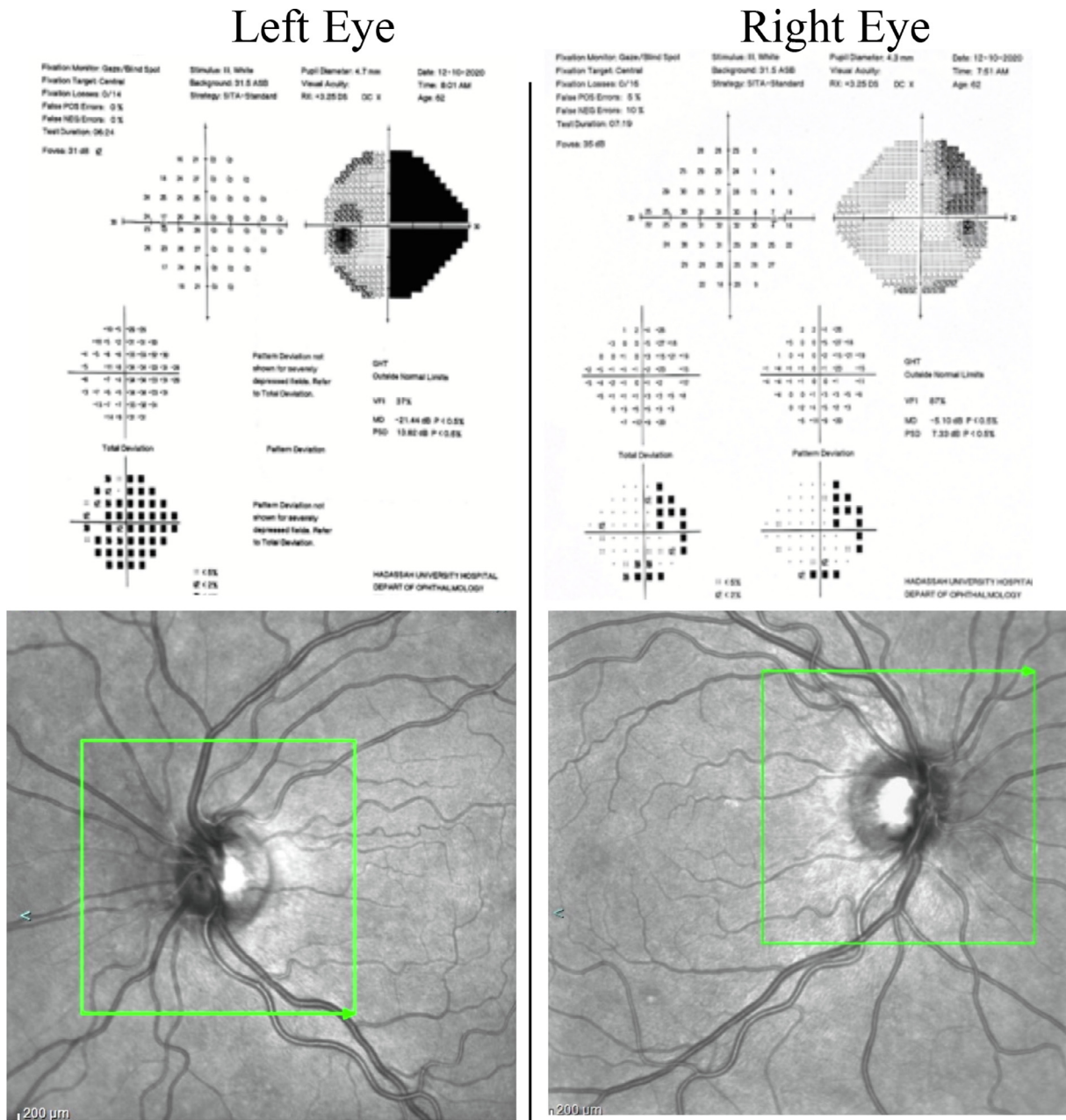


Fig. 1. Automated visual fields showing right homonymous hemianopia. Fundoscopy without sign of papilledema or chronic optic atrophy.

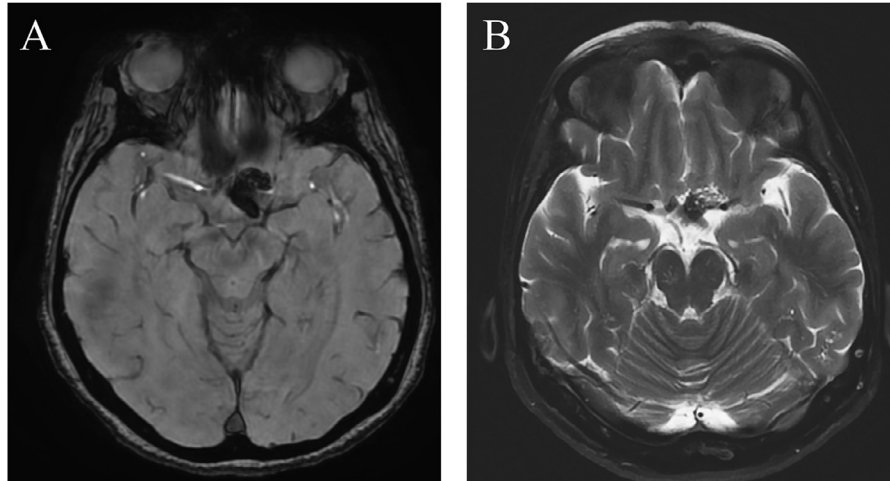


Fig. 2. A) Axial T1-weighted gadolinium-enhanced MRI, and B) axial T2-weighted MRI showing a left side non-enhancing hypointense suprasellar lesion, in a 62-year-old woman.

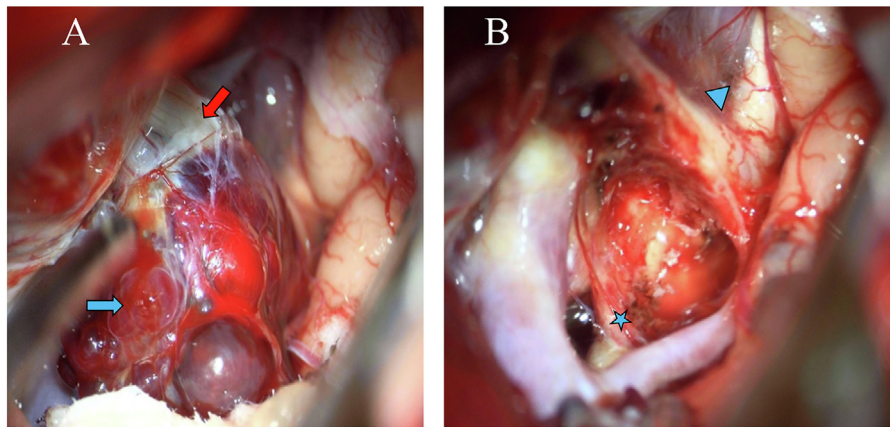


Fig. 3. A) Intraoperative image of the left optic tract cavernoma removal (blue arrow) through a left pterional craniotomy, compressing the left optic nerve (red arrow) B) Intraoperative image after removal of the cavernoma, showing the left optic tract (blue star) and the optic chiasm (blue arrow head).

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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