Large Hypophyseal Aneurysm Causing a Junctional Scotoma

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• 65 year-old woman
• Left optic neuropathy and headaches.
• Examination:
  – Visual acuity: 20/30+1 OD and 20/100 OS
  – Color vision: 11/14 OD and no control plate OS
  – 0.9 log unit left relative afferent pupillary defect.
Humphrey visual fields show a temporal hemianopia OD and diffuse depression OS, suggesting a junctional scotoma (lesion at the level of the posterior part of the left optic nerve affecting the chiasm)
Color fundus photographs of the optic nerves show bilateral temporal pallor.
Brain CT with contrast: Axial view shows a large well limited lesion in the region of the optic chiasm and right intracranial optic nerve (arrow)
Brain CT Angiogram (CTA) with contrast: Axial view shows a large multilobulated midline aneurysm (arrow)
A reconstruction of the circle of Willis from a brain CTA with contrast shows a right, multi-lobulated superior hypophyseal artery aneurysm measuring 1.6 x 1.2 x 2.2 cm with a 6 mm neck.
Catheter cerebral angiogram (frontal view) shows a right, multilobulated superior hypophyseal artery aneurysm (arrow) measuring 1.6 x 1.2 x 2.2 cm with a 6 mm neck.
Catheter cerebral angiogram (frontal view) status post successful treatment of the right hypophyseal aneurysm with a pipeline stent; the arrows shows the position of the treated aneurysm