Abducens Palsy

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53-year-old woman presented with binocular horizontal diplopia, which started 8 months prior. She had been unsuccessfully treated with prismatic correction and reported no recent trauma to her eyes or head, which is the most common acquired cause of abducens palsy.1 Ocular examination findings revealed a unilateral decrease in her visual acuity of 20/30-1 OD and 20/20⁻¹ OS and reduced color perception OD. The patient's pupils were equal, round, and reactive to light without an afferent pupillary defect. Extraocular muscle testing revealed limited abduction OD (image A), indicative of right abducens palsy. Forced duction test results were negative for restrictions, indicating a neurogenic origin.2 Glucose levels, thyroid-stimulating hormone levels, and sedimentation rate were normal, and laboratory results were negative for Lyme disease.

A magnetic resonance image of the brain and orbit revealed an aneurysm (2.8 cm anterior-posterior by 2.8 cm craniocaudal) of the right internal carotid

artery in the cavernous sinus (image B, arrow). Cerebral angiography depicted aneurysm thrombosis of 60% with compression and partial stenosis of the right internal carotid artery. The patient was given 325 mg aspirin and 75 mg clopidogrel daily and 1 month later underwent an uncomplicated Pipeline embolization of the aneurysm. The patient did not experience immediate resolution of abducens palsy after surgical correction. At 6 months, her ocular deviation did not change, and she now wears an eye patch to relieve the diplopia. (doi:10.7556/jaoa.2014.015)

References

- Hsu CS, Closmann JJ, Baus MR. Idiopathic unilateral cranial nerve VI palsy: a case report and review of the literature. J Oral Maxillofac Surg. 2008;66(6):1282-1286. doi:10.1016 /j.joms.2007.04.035.
- Goodwin D. Differential diagnosis and management of acquired sixth cranial nerve palsy. Optometry. 2006;77(11):534-539.

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