TABLE 2. Associated Etiologic Conditions*

| Associated Etiologic Conditions | No. of Patients |
|---|---|
| Infectious | |
| Otitis media | 55 |
| Viral infection | 11 |
| Febrile illness | 8 |
| Upper respiratory infection | 6 |
| Gastroenteritis | 1 |
| Exanthema | 1 |
| Tertiary Lyme disease | 1 |
| Infectious neuroretinitis | 1 |
| Urinary tract infection | 1 |
| Streptococcal pharyngitis | 1 |
| Tonsillitis | 1 |
| Drug | |
| Corticosteroid withdrawal | 10 |
| Corticosteroids | 9 |
| Vitamin A intoxication | 6 |
| Nalidixic acid | 4 |
| Antibiotics | 6 |
| Endocrine | |
| Ovarian dysfunction in menarche | 3 |
| Hypocalcemia | 1 |
| Traumatic | 23 |
| Miscellaneous | |
| Sinus occlusion | 14 |
| Psychosocial and nutritional deprivation | 6 |
| Blood dyscrasia | 4 |
| Cystic fibrosis | 4 |
| Heart murmur, mitral valve prolapse | 2 |
| Iron deficiency | 1 |
| Asthma | 1 |
| Hyperactivity | 1 |
| Renal disease | 1 |
| Systemic lupus erythematosus | 1 |
| Subarachnoid hemorrhage | 1 |
| Realimentation | 1 |
| Radiation vasculitis | 1 |
| Tonsillectomy and adenoidectomy | 1 |
| Appendectomy | 1 |
| Crohn disease | 1 |

*Among patients aged 18 years or younger with idiopathic intracranial hypertension.

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# Recurrent Abducens Nerve Palsy Caused by Dolichoectasia of the Cavernous Internal Carotid Artery

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PURPOSE: To describe a 59-year-old patient who had seven recurrent, self-limited episodes of isolated ipsilateral abducens nerve palsy in the previous 4 years. Each episode lasted between 2 and 5 weeks.

METHODS: Systemic examination and neuroimaging studies were performed.

RESULT: Repeated comprehensive examination failed to demonstrate any ocular or systemic condition apart from a lateral protrusion by dolichoectasia of the posterior portion of the cavernous left internal carotid artery, compressing the posterior left cavernous sinus.

CONCLUSION: Numerous self-limited episodes of sixth nerve palsy may be associated with structural abnormalities of the intracranial carotid vasculature.

ISOLATED PALSIES OF THE ABDUCENS CRANIAL NERVE have been associated with diabetes mellitus, hypertension, multiple sclerosis, increased intracranial pressure, intracranial tumors, trauma, aneurysms, postoperative complications, and various other inflammatory, infective, and infiltrative disorders. We present a patient in whom repeated episodes of isolated left abducens nerve palsy were related to dolichoectasia (also referred to as a tortuous fusiform aneurysm) of the internal carotid artery.

We examined a healthy 59-year-old man with a history of seven episodes of painless horizontal binocular diplopia during a period of 4 years, each episode lasting between 2 and 5 weeks. Medical history was negative for any systemic condition, including diabetes mellitus, hypertension, coronary and vascular

Accepted for publication March 20, 1997.
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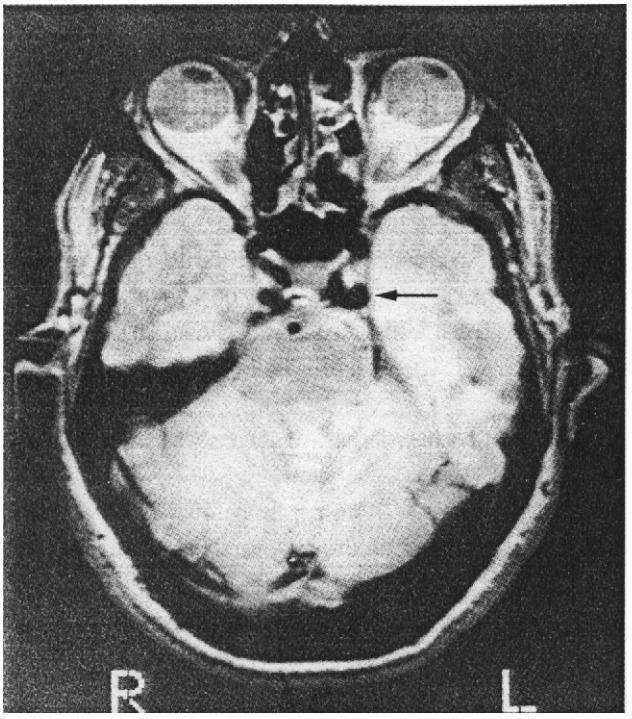


FIGURE 1. Axial proton density-weighted magnetic resonance imaging through the cavernous sinuses demonstrates a lateral tortuous ectasia of the posterior portion of the left internal carotid artery (arrow).

abnormalities, increased intracranial pressure, ethanol abuse, migraine headache, myasthenia gravis, or previous head trauma.

Because the patient has been followed up at our neuro-ophthalmology clinic during the past 2 years, we have observed his last three episodes. A description of the sixth episode follows. On examination, visual acuity in both eyes was normal (RE, 20/20; LE, 20/20−), and intraocular pressure measurements were within the normal range. Examination of eye movements disclosed left eye abduction deficit. A prism-cover test for distance disclosed 4 prism diopters of esotropia on right gaze, 20 prism diopters on primary gaze, and 45 prism diopters on left gaze. In both eyes, the fundus appearance was normal, and no swelling of the optic nerve heads was noted. No relative afferent pupillary defect was elicited, and color vision was normal. Facial sensation and corneal reflexes were normal. On auscultation, no bruits could be heard over the skull, orbits, or neck vessels. The remainder of the neurologic examination was normal. Blood glucose and oral glucose tolerance test, thyroid functions, acetylcholine receptor antibodies, edrophonium chloride (Tensilon) test, automated static visual fields, and orbital ultrasonography were all within normal limits.

Computed tomographic scan showed a fusiform aneurysm of the left supraclinoid internal carotid artery. Additionally, magnetic resonance angiography demonstrated compression of the posterior portion of the left cavernous sinus by a tortuous ectasia of the posterior cavernous left internal carotid artery (Figures 1 and 2). No evidence of hemorrhage or of demyelination plaques was present.

Neurosurgical consultation favored a conservative approach, and no surgical intervention was recommended. One month later, the diplopia subsided spontaneously, and no residual limitation of gaze or esotropia by cover test was present. A similar seventh self-limited episode occurred several months later.

Yu and associates[1] reviewed 50,000 cerebral arteriograms, of which only 29 cases showed unequivocal arterial ectasia. Associated findings included hypertension (64%), ischemic heart disease (35%), and diabetes mellitus (16%). Patients with carotid ectasia showed unilateral visual loss (21%), homonymous hemianopsia (13%), acute diplopia (9%), and Horner syndrome (4%). The overall mortality from carotid ectasia was 45% during a mean follow-up period of 5.6 years. In a review of 1,918 cases of paralysis of the abducens cranial nerve, only 58 (3%) were caused by aneurysm.[2] Recurrent isolated unilateral sixth nerve palsy in children is a recognized entity secondary to immunization or viral illness.[3] Cluster headache has also been reported in association with recurrent sixth nerve palsy. Hamilton and Lessell[4] reported five cases of recurrent, idiopathic unilateral isolated lateral rectus muscle palsy in adults. Two of these patients had undergone cerebral angiographies that were both normal. Tumors of the base of the skull were reported as rare causes of sixth nerve palsy with spontaneous improvement. It was postulated that several mechanisms could be associated with the recovery.[5]

We are not aware of a similar report in the literature in which multiple self-limited episodes of sixth nerve palsy were associated with structural abnormalities of the intracranial carotid vasculature.

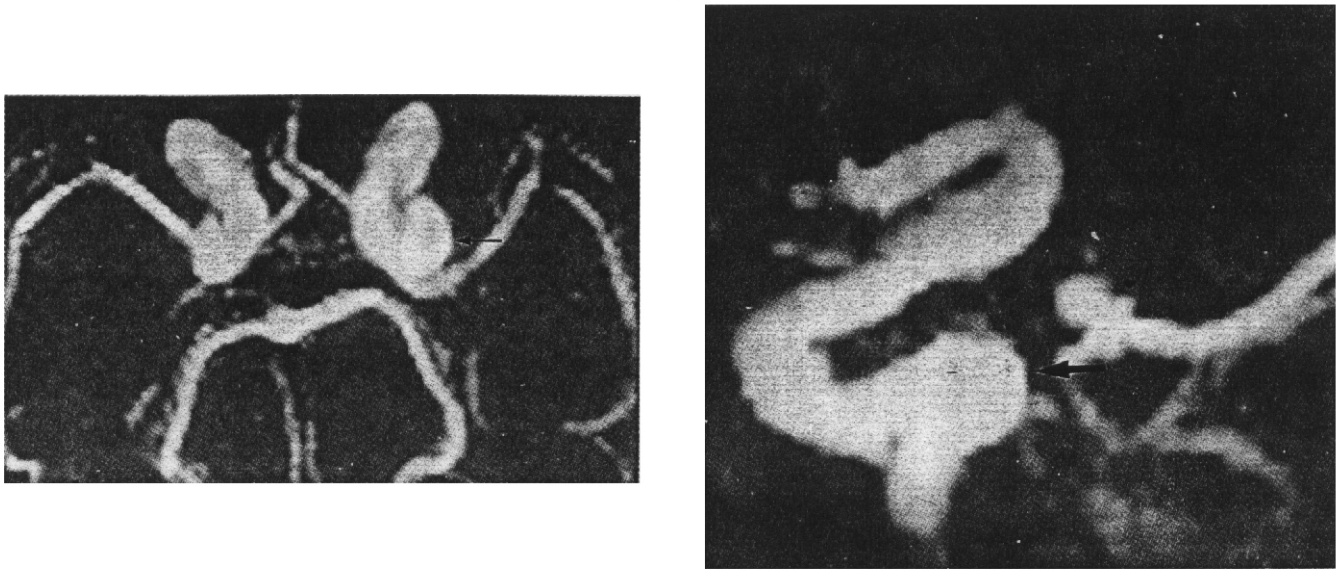

FIGURE 2. (Left) Axial projection of the maximum intensity projection of axial two-dimensional time-of-flight magnetic resonance angiography slices demonstrates the lateral and posterior protrusion of the ectatic left cavernous internal carotid artery (arrow). (Right) Sagittal maximum intensity projection of the left internal carotid artery demonstrates the posterior protrusion of the kinked cavernous internal carotid artery (arrow).


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# Retinal Vein Occlusion and Transient Monocular Visual Loss Associated With Hyperhomocystinemia


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PURPOSE: To report a 24-year-old man with bilateral central retinal vein occlusions who had preceding episodes of prolonged transient monocular visual loss during which ophthalmoscopic findings were not suggestive of vein occlusion.

METHOD: Case report.

RESULT: Extensive hematologic studies for causes of vein occlusion were unremarkable with the exception of increased plasma homocysteine in the patient and in his asymptomatic father.

CONCLUSIONS: Impending vein occlusion should be considered in the differential diagnosis of transient monocular visual loss regardless of ophthalmoscopic appearance, and hyperhomocystinemia should be considered as a possible cause of retinal vein occlusion.


PATIENTS WITH CENTRAL RETINAL VEIN OCCLUSION occasionally harbor an underlying hematologic disorder[1,2] and infrequently report episodes of tran-


Accepted for publication April 1, 1997.

Departments of Ophthalmology (V.B., N.J.N., P.S.), Neurology (N.J.N.), and Neurosurgery (N.J.N.), Emory University School of Medicine. This study was supported in part by a departmental grant (Ophthalmology) from Research to Prevent Blindness, Inc, New York, New York.



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