

in the right eye at 2 yrs of age and a history of progressive painless proptosis of the same eye for one year. At the time of diagnosis, a complete oculomotor nerve palsy with dilated pupil unreactive to direct and consensual light stimulation, ptosis, and a visual acuity of 20/300 were present on the right. Intracranial, intraorbital, and asymptomatic epidural cervical spine meningiomas were demonstrated by CT and MRI scans and by angiography. All tumors were surgically excised successfully. (Tomita T et al. Multiple meningiomas in a child. Surg Neurol Feb 1988;29:131-6).

**COMMENT.** Proptosis was a late sign of the intraorbital meningioma in this case, preceded by external deviation of the eye and loss of vision for a period of 18 mos. Meningiomas may involve the nasal wall of the orbit and invade the olfactory groove as in the present case, or may originate at the sphenoidal ridge and cause the classical syndrome of unilateral anosmia, optic atrophy or papilledema, and exophthalmos. With extension of the tumor to the cribriform plate, the anosmia can be bilateral and more readily detected even in children.

The young child is unlikely to react to an oil of wintergreen or tooth-paste odor test. However, taste is partially perceived through the olfactory system, and the mother may have noticed a loss of appetite sufficient to excite an index of suspicion of involvement of the first cranial nerve, that often neglected part of the neurologic and eye examinations. Early diagnosis and treatment of meningiomas involving the orbit and presenting with loss of vision led to improved visual acuity in 9 of 10 patients with tumors less than 3 cm diameter and in 56% of a total of 85 patients followed postoperatively. (Kadis GN et al. Surg Neurol 1979;12:367).

#### CHIASMATIC/HYPOTHALAMIC GLIOMAS

Twenty-four children with progressive chiasmatic/hypothalamic glioma (CHG) have been treated with actinomycin D and vincristine combination chemotherapy without radiotherapy and followed for a median of 4.3 yrs at the Children's Hospital of Philadelphia, PA. Diagnosis and treatment required a positive CT or MRI, histological confirmation in 15 without optic nerve involvement, and progressive neurological or visual deterioration. Fifteen (62.5%) are free of progression with normal IQ's, 9 showing tumor regression, and 9 have radiographic or clinical progression of the tumor within 2-6 yrs after initiation of therapy. The authors allude to intellectual and endocrinological sequelae of radiotherapy for CHG in young children and conclude that chemotherapy may significantly delay the need for radiotherapy. (Packer RJ et al. Treatment of chiasmatic/hypothalamic gliomas of childhood with chemotherapy: an update. Ann Neurol Jan 1988;23:79-85).

**COMMENT.** Both radiotherapy and chemotherapy carry the risk of potentially serious adverse effects. Histological confirmation of the tumor type before initiation of therapy may now be possible since thin-needle biopsy with CT guidance is an accepted low risk procedure for neurosurgeons (Szeiniak et al. Cancer 1984;54:2385).

#### SPINAL A-V MALFORMATION IN A NEONATE

A newborn male infant with flaccid paraplegia, without contractures, deformities or atrophy, caused by an arteriovenous malformation (AVM) of the dorsal spinal cord, is reported from the Depts Neurosurgery and Pediatrics, Hospital Infantil Nino Jesus and Dept Neuroradiology, Hospital Infantil La Paz, Madrid, Spain. Diagnosis was by lumbar puncture showing blood in the

CSF, myelography demonstrating serpiginous filling defects and increased spinal cord diameter, and a spinal angiographic outline of the AVM with a large intraspinal aneurysmal sac. Following embolizations, clipping of feeding vessels, and surgical removal of the sac, the AVM was closed but the paraplegia had persisted at 10 mo follow-up. (Esparza J et al. Arteriovenous malformation of the spinal cord in the neonate. Child's Nerv Syst 1987; 3(5): 301-303).

**COMMENT.** Spinal cord A-V malformations may be dorsal extradural, compact intraspinal or diffuse intraspinal involving several vertebral segments. The latter presents in childhood or adolescence and carries a poor prognosis. Stereotaxic radiosurgery or proton beam therapy may offer better results than surgical intervention for large AVM's involving eloquent nervous tissue. (Kjellberg RN et al. N Engl J Med 1983;309:269).

#### CEREBRAL A-V MALFORMATION IN NEONATE

A baby girl who developed congestive heart failure at 3 days of age and was shown to have an aneurysm of the vein of Galen is reported from the Dept Child Health, The Queen's Univ Belfast, Royal Maternity Hosp and Dept Radiology, Royal Victoria Hosp, Belfast. Treatment by embolization with helical stainless steel coils inserted along the straight sinus occluded the aneurysm. Postoperatively, recovery was rapid, the cranial bruit disappeared, and medical treatment for heart failure was discontinued. At 21 mo follow-up, the height and head circumferences, and growth and development were normal. (McCord FB, Shield MD et al. Cerebral arteriovenous malformation in a neonate: treatment by embolization. Arch Dis Child Dec 1987;62(12):1273-1275).

**COMMENT.** In this case non-surgical treatment was successful. Ischemic brain lesions resulting from a steal phenomenon directing blood toward the aneurysm, as reported by Norman and Becker (J Neurol Neurosurg Psychiat 1974;37:252), did not result.

#### PAPILLEDIMA IN CHILDREN

The use of oral fluorescein in the diagnosis of early papilledema in 23 children aged 1 mo to 10 yrs is reported from the Dr Rajendra Prasad Centre for Ophthalmic Sciences, All-India Inst of Med Sciences, Ansari Nagar, New Delhi, India. Of 15 children with suspected or early papilledema associated with hydrocephalus (10), seizures (3), possible tumor (1), and unilateral proptosis (1), late disc staining and retinal vascular fluorescence occurred in 12, the fluorescence at 60 min being significantly greater or of equal intensity to that at 30 min, denoting a positive test. All cases positive on oral fluorescein showed CT evidence of raised intracranial pressure, while those with negative fluorescein tests had normal CT's. In 8 children with pseudopapilledema examined after oral fluorescein, the retinal vascular fluorescence and slight disc head staining with sharp margins at 30 min declined markedly by 60 min, a negative result, identical to that found in normal fundi. The authors caution that a negative result may occur with very early stages of papilledema manifested only by venous engorgement. (Ghose S, Nayak BK. Role of oral fluorescein in the diagnosis of early papilledema in children. Brit J Ophthalmol Dec 1987; 71(12):910-915).

**COMMENT.** The necessity for conventional intravenous administration of fluorescein often precludes its use in small children with suspected papilledema. Oral fluorescein offers a more practical test that may gain acceptance if these results are confirmed. The funduscopic examination and