inflammation and scar formation in the superior nasal quadrant. These authors also hypothesized that the size of the implant was a predisposing factor for the development of ocular motility disturbances. Nevertheless, even with smaller implants, like Ahmed's type, these problems can occur. Indeed, Coats *et al*[2] described a case in which the primary cause of ABS was the disproportion between the orbital size and the Ahmed implant, since ocular deviation began immediately after surgery.

In the present case, there was no disproportion between the size of the orbit and the implant, which demonstrated that even with the use of an implant of a regular size (Ahmed), limitation of ocular motility could occur due to fibrosis. This fibrotic reaction presumably caused a shortening of the superior oblique tendon, causing limited elevation in the adduction of the affected eye of our patient.

In selected cases in which the superior nasal region is the only possible place to implant the device, one must choose those with small areas of drainage and the procedure must be performed with the least inflammatory stimuli. Moreover, patients must be informed about the possibility of postoperative complications such as ocular motility abnormalities and diplopia.

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Sir,

Vertical Gaze Palsy in a case with Growing Skull Fracture and Porencephalic Cyst

Linear or nonlinear skull fractures that enlarge with time are termed growing skull fractures.[1–3] These are commonly seen in children, possibly because of the greater malleability of the infant skull and the tighter adherence of the dura to the bone.[1] This growth of the fracture may cause atrophy of the underlying cerebral tissue along with the formation of a porencephalic cyst, which may extend through the skull defect into the subgaleal space, all of which may result in progressive neurological deficits.[1–3]

We report an unusual case of a young boy harbouring a large porencephalic cyst, who was found to have vertical gaze palsy on ocular examination in the absence of other neurological signs and symptoms.

Case report

A practitioner referred a 10-year-old boy with no systemic abnormalities to our strabismus clinic with the diagnosis of alternate convergent squint, present for the past 9 years. Ocular examination revealed a visual acuity of 6/6 (Snellen's alphabetical chart) bilaterally, with no significant refractive errors. Right suppression was present. Ocular motility examination revealed mild restriction of right abduction associated with nominal contracture of the right medial rectus muscle on passive ductions. Gross restriction of upgaze and downgaze was present in both eyes but the forced ductions were normal (Figure 1). The Bell's phenomena were intact (Figure 1). Fundus examination revealed mild pallor of both the optic discs. The rest of the anterior and posterior segment evaluation was unremarkable bilaterally. A diagnosis of

vertical gaze palsy was made, and the patient was referred for neurological evaluation, which was reported to be normal.

The father subsequently revealed a history of head trauma to the child at 8 months of age due to fall from a height. CT scan evaluation performed at that time revealed a left parieto-temporal fracture with subcutaneous haematoma and oedema of the underlying cerebral tissue (Figure 2, left). There was no history of progressive neurological deficit or seizure disorders. The right esotropia appeared at about 9 months of age.

We ordered a MRI scan of the brain, which revealed a large porencephalic cyst extending from the left lateral ventricle to the site of the fracture (Figure 2, right) with an extremely thin layer of overlying cerebral tissue. No bulge or gross defect was felt on clinical examination. As the patient had been asymptomatic for 9 years, no surgical intervention was performed. The child was kept on a close follow-up.

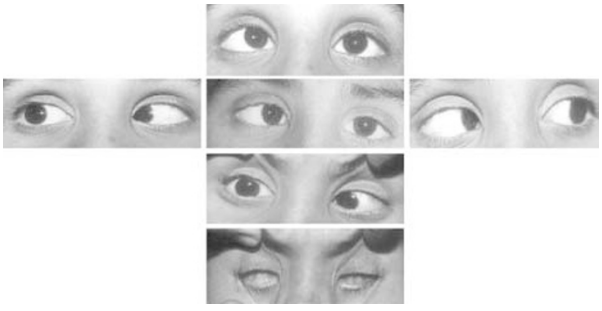

Figure 1 Clinical photograph of the patient showing esodeviation in primary gaze. Restriction of ocular movements in upgaze and downgaze and mild underaction of the right lateral rectus muscle was present. The Bell's phenomenon was intact.

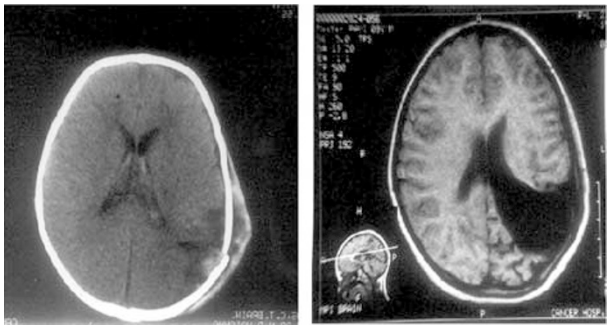

Figure 2 (left): CT scan of the patient taken at the time of head trauma in 1993 revealed a left parieto-temporal bone fracture with oedema of the underlying tissue. A subcutaneous haematoma overlying the fracture was present. (right): MRI scan of the brain demonstrating a large porencephalic cyst starting from the left lateral ventricle to the fracture site. There is no evidence of an actual bulge of the cystic mass outside the fracture site or a midline shift of the ventricle intracranially demonstrating normal ICP at present.

Comment

A porencephalic cyst is a cavity within the cerebral hemisphere, filled with cerebrospinal fluid that communicates directly with the ventricular system.[1,4] These are usually associated with various ophthalmic and neurological signs, mainly compressive in origin.[4,5] It is generally recommended that in the presence of increased intracranial pressure (ICP) or progressive neurological deficits, surgical modes be adopted to treat these cysts by shunt surgery with or without closure of the defect by a duro-cranioplasty.[1–3,5]

The vertical gaze palsy alerted us to the possibility of an intracranial lesion in the present case. Subtle morphological changes in the brain have been observed in patients with infantile esotropia.[6] However, in this case the esotropia was probably due to the increased ICP at the time of trauma resulting in lateral rectus palsy that developed secondary concomitance later.[7] This probably accounts for the mild restriction of abduction seen in the right eye at present. The pathogenesis of the vertical gaze palsy remains unclear, but could be due to the extensive cyst compressing the vertical gaze centres.

It remains controversial whether a duro-cranioplasty should be performed prophylactically in a patient such as this to prevent any future deficit,[1–3,5] or whether he should be kept under close monitoring and be operated only if necessary.[8,9] The role of strabismus surgery also remains controversial.

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Sir,

Coexistence of optic disc drusen and idiopathic intracranial hypertension in a child

The coexistence of optic disc drusen (ODD) and idiopathic intracranial hypertension (IIH) was first described in an adult in 1979.[1] To date there have been eight cases reported in the literature,[1–4] but to our knowledge this is the first report in a child.

Case Report

An 11-year-old girl was referred with possible papilloedema. She admitted to a 2-week history of headaches, but was otherwise well. There was no relevant past medical history.

Her visual function was normal with enlarged blind spots present bilaterally. Fundoscopy revealed anomalous discs, suggestive of papilloedema. An urgent paediatric referral was made. Following a normal CT brain, lumbar puncture revealed an elevated cerebral spinal fluid (CSF) pressure of 40 cm of water. CSF analysis was normal. A diagnosis of IIH was made and treatment with acetazolamide commenced (500 mg mane, 750 mg lunch, and nocte), which controlled the CSF pressure at 10 cm of water. The headaches resolved.

On follow up at the Eye Unit, ODD were identified (Figure 1) and confirmed by B-scan ultrasonography. The diagnosis of IIH was therefore questioned, although the neurological opinion was that the CSF pressure measurements were accurate and that the two conditions must be in coexistence.

The patient's visual acuities have remained 6/4 and there has been no deterioration in the visual fields to date. She continues under neurological and ophthalmological follow up.

Comment

ODD are hyaline-containing bodies that begin 'buried' in the substance of the optic nerve, migrate forward with age and become visible around the second decade. [4,5] They occur in 3.4–24 per 1000 population and are bilateral in approximately 75% of cases.[4] Impairment of visual acuity is rare, but visual field defects may occur in up to 50%,[6] although generally are not significant, and patients remain asymptomatic. Follow-up is not required.

IIH is characterized by increased intracranial pressure in the presence of normal imaging. It is relatively uncommon in childhood, presenting once or twice a year to a large referral centre.[8] The headache is often frontal and severe and occasionally associated with vomiting. Transient visual obscurations may occur, although may be described by children as 'blurring or mistiness'. The papilloedema is typically bilateral and symmetrical.[9]

Disregarding ODD, the diagnosis of IIH in children may be challenging. Apart from the difficulties in examination, accurate imaging, and lumbar puncture assessment may require separate anaesthetics. Also, the normal range for CSF pressure in children has not been established and general anaesthesia may artificially increase measurements.[8]

This case emphasizes the importance of detailed clinical history taking in children with presumed pseudopapilloedema. In the setting of IIH, the finding of ODD may lead to diagnostic confusion causing delay in appropriate management. Enquires must

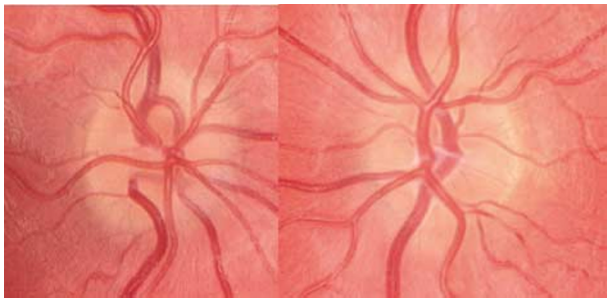

Figure 1 On follow-up optic disc drusen were identified.