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Commercial or proprietary interest: We do not have any commercial or proprietary interest in any of the products mentioned in this article

Eye (2007) **21,** 1535–1537; doi:10.1038/sj.eye.6702988; published online 28 September 2007

Sir,

Prenatal diagnosis of dacryocystocele

Congenital dacryocystocele is a benign solitary mass arising from narrowing or obstruction of the nasolacrimal system during natal development. Its prenatal diagnosis, using sonography, is straightforward. CT and MRI are of benefit only if the diagnosis is unclear.[1] It is usually detected during the third trimester. Many lesions resolve spontaneously or after minimal intervention.

Case report

We report a case of a healthy male neonate with a congenital dacryocystocele, which was diagnosed pre-natally. The mother was a 30-year-old primigravida with no history of consanguinity. A routine screening ultrasound test at 20 weeks of gestation was normal. At 33 weeks' gestation, she underwent a second routine ultrasound scan. Both surveys were performed using an ATL 3000 ultrasound machine (Philips Medical Systems, Bothell, WA, USA). At this second examination, a unilateral 10 mm hypoechogenic mass was located inferiomedially to the right orbit. The differential diagnosis for a medial canthal mass includes dacryocystocele, capillary hemangioma, solid dermoid, dermoid cyst, encephalocele, meningoencephalocele, nasal glioma, lymphangioma, and heterotopic brain. Further examination did not reveal any other pathological findings and demonstrated normal fetal facial anatomy (Figure 1). Repeated scans demonstrated no change in the mass size. On the 39th week of gestation, a vacuum extraction delivery was performed. Gestational weight was 2105 g. His Apgar score was 9/10. The diagnosis of congenital dacryocystocele was confirmed postnatally (Figure 2a). The infant had no signs of epiphora, dacryocystitis, facial cellulitis, or airway obstruction. The lesion resolved spontaneously 24 h postnatally with no further intervention (Figure 2b).

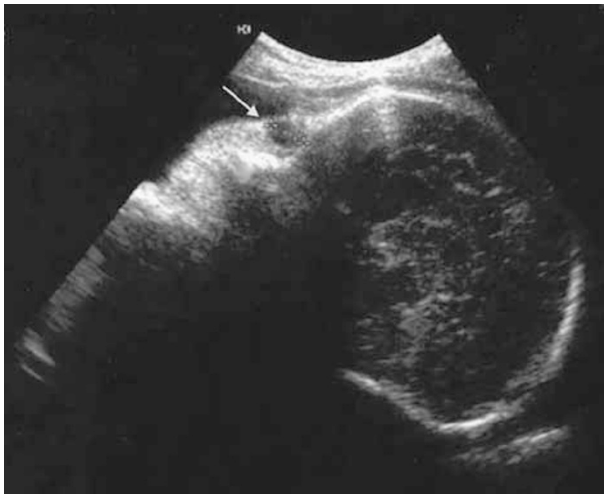

Figure 1 Prenatal ultrasound scan (at 33 weeks' gestation) that demonstrates the globe, the dacryocystocele (arrow), and the nose.

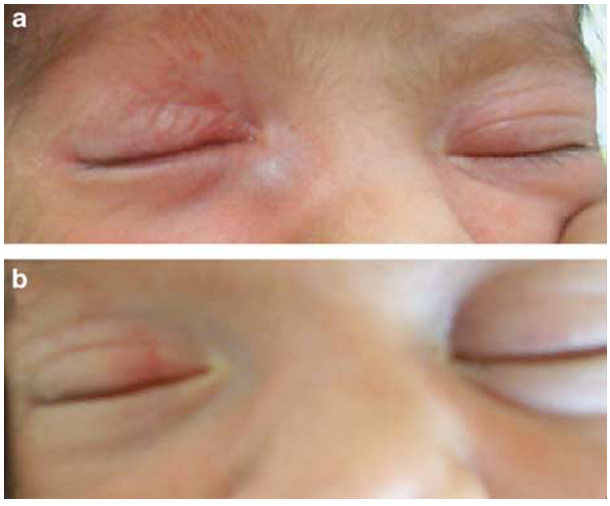

Figure 2 Postnatal photograph (a) immediately after birth showing the dacryocystocele; a bluish, cystic, non-tender, firm mass inferior to the right medial canthal tendon and (b) spontaneous resolution of the dacryocystocele 24 h later with no further intervention.

Comment

Prenatal diagnosis of dacryocystocele is very important because of the possibility of accompanying pathologies such as anterior encephalocele, teratoma, hemangioma, glioma, or rhabdomysarcoma.[2] A retrospective study of congenital dacryocystoceles showed complete resolution in 90% of cases following surgery, favouring early surgical intervention.[3] Another retrospective study reported spontaneous resolution in 16.7% with a recurrence rate of 22% after probing.[4] We suggest conservative treatment initially. If spontaneous resolution does not occur within 24 h, then the nasolacrimal probing is the treatment of choice. Surgical intervention may benefit those who are suffering from dacryocystitis, facial cellulitis, breathing difficulty, recurrences, and failure of digital massage, or probing.

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Eye (2007) **21,** 1537–1538; doi:10.1038/sj.eye.6702994; published online 5 October 2007

Sir,

Optic disc pit as evaluated with en-face optical coherence tomography: report of a case

Anomalous excavations of the optic disc are congenital cavitary abnormalities that may be associated with macular retinoschisis and serous detachment.[1,2]

Case report

A 12-year-old white girl came to our observation with a 1-month history of blurred vision and metamorphopsias in the left eye. She had no systemic disorders and no family history of ophthalmic disorders. Best corrected visual acuity was 20/20 OD, and hand movement OS. Anterior segment and intraocular pressure were normal bilaterally, whereas ophthalmoscopic examination of the left eye revealed a large, deep, sharply delimited optic disc excavation, and macular hole-like abnormality (Figure 1). Examination with en-face optical coherence tomography (OCT) (Time-domain OCT/Scanning Laser Ophthalmoscope, OTI, Toronto, Ontario, Canada) of the left eye showed a sensory detachment in the temporal aspect of the excavation and a foveoschisis with foveal cyst. An optically empty, poorly defined cystic area was present close to the neural rim on the bottom of the pit. It was covered by unbroken retinal-like tissue and was contiguous to the sensory detachment. Hyper-reflective pillars appeared subretinally outside the optic pit, at the border of the schisis.

Comment

Cavitary optic disc abnormalities are thought to be determined by malclosure of the embryonic ocular fissure. Dysplastic retina herniates into a collagen-lined sac or pocket, and often extends posteriorly into the subarachnoid space through a defect in the lamina cribrosa.[2] Fluid from the disc excavation may cause intraretinal oedema followed by macular detachment. Fluid can arise from the vitreous cavity and subarachnoid space, as suggested by the incomplete differentiation and porous nature of herniated tissues on histological examination[3], by OCT findings[4] and by

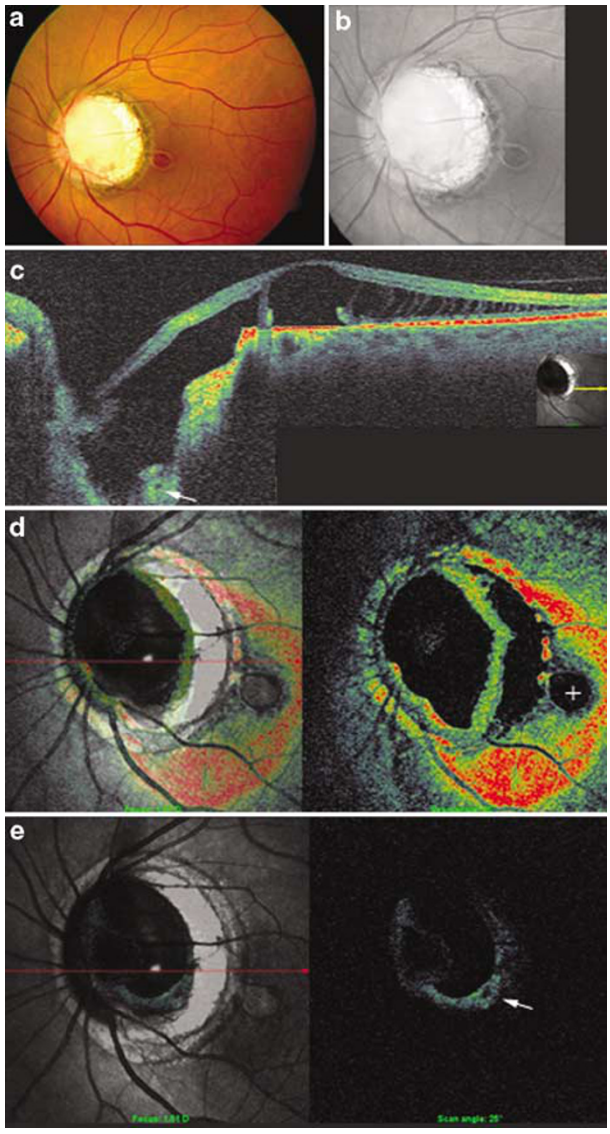

Figure 1 (a) Colour and (b) red–free fundus images of the left eye show a large, deep anomalous excavation of the optic disc, with a macular hole-like abnormality. (c) En-face optical coherence tomography (OCT) cross-sectional B-scan shows a foveoschisis and a foveal intraretinal cyst, sensory detachment at the temporal aspect of the excavation, hyper-reflective pillars at the schisis border, and a cystic formation on the pit bottom (arrow). The distance between the cystic formation and the level of the pigment epithelium was 1.04 mm. Antero-posterior consecutive en-face OCT coronal C-scans show (d) the edges of the foveal cyst (cross) and the optic disc pit, and (e) the optically empty cystic space on the pit bottom (arrow). The left panel of the C scans shows overlaid confocal red–free image/coronal C-scan, while the right panel shows not overlaid C-scan. The angular size for all scans is $30 \times 30^{\circ}$.