for syndromes. *Ultrasound Obstet Gynecol* 1999; **14**(1): 71–73.
3 Shashy RG, Durairaj VD, Holmes JM, Hohberger GG, Thompson DM, Kasperbauer JL. Congenital dacryocystocele associated with intranasal cysts: diagnosis and management. *Laryngoscope* 2003; **113**(1): 37–40.
4 Mansour AM, Cheng KP, Mumma JV, Stager DR, Harris GJ, Patrinely JR *et al*. Congenital dacryocele: a collaborative review. *Ophthalmology* 1991; **98**: 1744–1751.

AH Abbasi[1,2,3], N Haj[4], T Nseir[4] and HJ Garzozi[1,2,3]

[1]Department of Ophthalmology, Hopital Francais Saint Vincent De Paul, Nazareth, Israel
[2]Department of Ophthalmology, Bnai-Zion Medical Center, Haifa, Israel
[3]The Rappaport School of Medicine, Technion, Haifa, Israel
[4]Department of Obstetrics and Gynecology, Hopital Francais Saint Vincent De Paul, Nazareth, Israel
E-mail: aabbasi77@yahoo.com

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

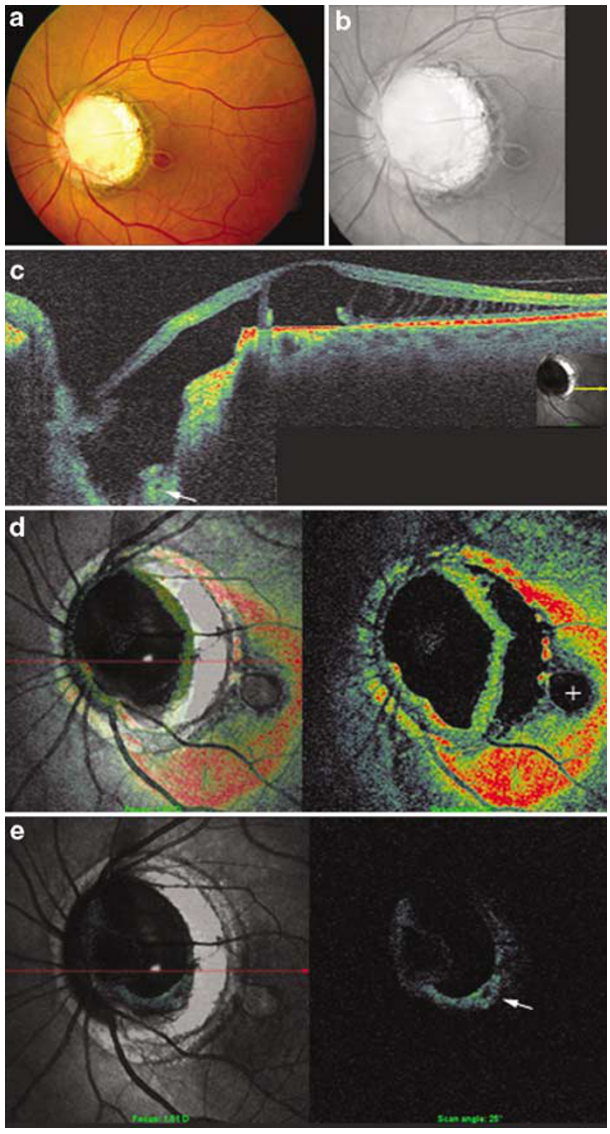

Figure 1 (a) Colour and (b) red–free fundus images of the left eye show a large, deep anomalous excavation of the optic disc, with a macular hole-like abnormality. (c) En-face optical coherence tomography (OCT) cross-sectional B-scan shows a foveoschisis and a foveal intraretinal cyst, sensory detachment 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 $30 \times 30^{\circ}$.

migration of gas bubbles among the subarachnoid space, the subretinal space, and the vitreous cavity.[5] To our knowledge, this is the first *in vivo* report of a cystic lesion on the bottom of an optic disc pit. This finding could suggest a communication between the subarachnoid and subretinal space. In conclusion, it is conceivable that the peculiar pillars outside the optic pit area could be dysplastic retinal tissue mechanically stretched by subretinal fluid. This mechanism could explain seepage of subretinal fluid.

References

1 Lincoff H, Lopez R, Kreissig I, Yannuzzi L, Cox M, Burton T Retinoschisis associated with optic nerve pits. *Arch Ophthalmol* 1988; **106**: 61–67.
2 Gass JD. Serous detachment of the macula secondary to congenital pit of the optic nerve head. *Am J Ophthalmol* 1969; **67**: 821–841.
3 Irvine AR, Crawford JB, Sullivan JH. The pathogenesis of retinal detachment with morning glory disc and optic pit. *Retina* 1986; **6**: 146–150.
4 Meirelles RL, Aggio FB, Costa RA, Farah ME. STRATUS optical coherence tomography in unilateral colobomatous excavation of the optic disc and secondary retinoschisis. *Graefes Arch Clin Exp Ophthalmol* 2005; **243**(1): 76–81. e-pub 2004 August 4.
5 Johnson TM, Johnson MW. Pathogenic implications of subretinal gas migration through pits and atypical colobomas of the optic nerve. *Arch Ophthalmol* 2004; **122**(12): 1793–1800.

V Piccirillo[1], R Forte[2], A Savastano[3], GL Cennamo[2] and MC Savastano[4]

[1]Eye Department, Santa Scolastica Hospital, Cassino, Italy
[2]Eye Department, University Federico II, Naples, Italy
[3]Eye Department, Second University, Naples, Italy
[4]Eye Department, Catholic University, Rome, Italy
E-mail: raifor@hotmail.com

Eye (2007) **21,** 1538–1539; doi:10.1038/sj.eye.6702998; published online 5 October 2007

Sir,

Persistent retinal macrocyst following pars plana vitrectomy for rhegmatogenous retinal detachment

A 45-year-old Caucasian male presented with sudden painless loss of vision in his left eye 2 years after undergoing uneventful cataract surgery. Original refraction was −6.50 D in both eyes. On examination, visual acuity was 0.8 RE and HM LE. There was a dense vitreous haemorrhage. A pars plana vitrectomy was performed and revealed superonasal and inferotemporal rhegmatogenous retinal detachments (RRD). A break was identified in the superior but not in the inferior detachment. The retina flattened under perfluorooctane (PFO). Tamponnade was achieved with 20% SF_6 after PFO-air exchange. Postoperative acuity LE was 0.8 at 1 month and the retina remained attached. A large postoral inferotemporal retinal cyst was noted. The wall was uncorrugated and vascularized (Figure 1). A small subretinal PFO residue was noted posterior to the cyst. B-scan ultrasonography confirmed the hypoechogeneity of the lesion (Figure 2). No prophylactic retinopexy was applied and the lesion remained stable over 24 months.

Figure 1 Large postoral cyst in the inferotemporal retina. Note smooth vascularized surface. Small subretinal perfluorooctane cyst posterior to the large lesion.

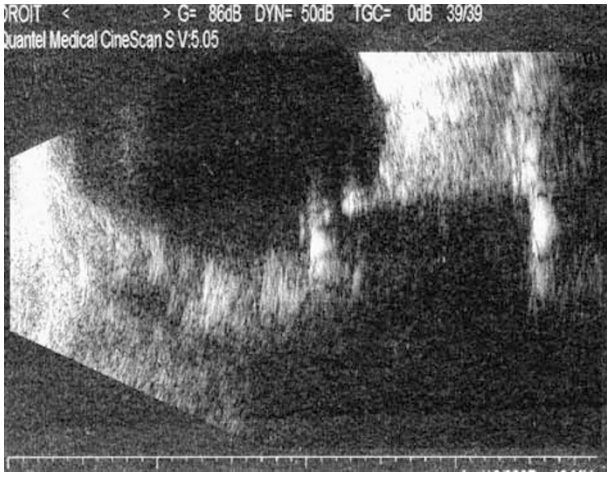

Figure 2 Standard B-scan echography showing the inferior macrocyst as an elevated, hypoechogenic lesion. Note long orbital shadow.

The differential diagnosis of a large postoral cyst includes pars plana cysts (PPCs) and retinal cysts. PPCs are physiological and can become quite large.[1] Less common causes include haemorrhagic retinal macrocysts,[2] cysts of chronic RRD,[3] subretinal hydatid cysts,[4] and retained subretinal perfluorocarbon.[5] Known risk factors for perfluorocarbon retention include peroperative retinotomy or retinectomy. In this case no break was identified in the inferotemporal detachment, but PFO could have entered the subretinal space through the superior horsehoe tear and tracked inferiorly postorally.

The postoral cyst did not change in size, shape or pigmentation over 24-month follow-up. As it was not seen peroperatively, it is likely to represent a PFO