G. W. Aylward, MD, FRCS, FRCOphth
R. J. Marsh, FRCS
C. M. P. Claoué, MD, FRCS, FRCOphth

Moorfields Eye Hospital
City Road
London EC1V 2PD
UK

References

1. Aylward GW, Claoué CMP, Marsh RJ, Yasseem N. Influence of oral acyclovir on ocular complications of herpes zoster ophthalmicus. Eye 1994;8:70–4.
2. Cobo LM, Foulks GN, Liesegang T, *et al.* Oral acyclovir in the therapy of acute herpes zoster ophthalmicus: an interim report. Ophthalmology 1985;92:1574–83.
3. Cobo LM, Foulks GN, Liesegang T, *et al.* Oral acyclovir in the therapy of acute herpes zoster ophthalmicus: an interim report. Ophthalmology 1986;93:763–70.
4. Harding SP, Porter SM. Oral acyclovir in herpes zoster ophthalmicus. Curr Eye Res 1991;10(Suppl):177–82.
5. Abt K. Problems of repeated significance testing. Controlled Clin Trials 1981;1:377–81.
6. Smith AH, Bates MN. Confidence limit analyses should replace power calculations in the interpretation of epidemiologic studies. Epidemiology 1992;3:449–52.

Sir,

I read with interest the letter from Hingorani, Mooney and Singh (Eye 1994;8:603–4). Their point that congenital optic nerve lesions occur in patients with elevated intraocular pressure is important and should be considered particularly where visual field changes are atypical of glaucoma or there is marked asymmetry of the disc appearance. It is unfortunate that the published photographs are wide-field views as much more information can be gained from a 20° field, preferably as a stereoscopic pair.

One differential diagnosis not mentioned is the acquired pit of the optic nerve (APON).[1,2] Javitt *et al.*[1] found APON in 74% of patients with normal tension glaucoma and 15% of those with hypertensive glaucoma. The associated field defect is often similar to that of the patient described but may progress in the absence of treatment and therefore become symptomatic. As in this patient APON are usually located in the lower half of the disc. Hypofluorescent areas on the optic disc are also common in glaucoma, particularly the normal-tension variety.[3]

Even when a congenital disc abnormality is suspected in a patient with elevated intraocular pressure it would be prudent to monitor the disc appearance and visual field in case the diagnosis is incorrect or there is coincidental glaucoma.

C. D. Morsman, FRCOphth

Department of Ophthalmology
North Hampshire Hospital
Basingstoke RG24 9NA

References

1. Javitt JC, Spaeth GL, Katz LJ, *et al.* Acquired pits of the optic nerve. Ophthalmology 1990;97:1038–43.
2. Radius RL, Maumenee AE, Green WR. Pit-like changes of the optic nerve head in open-angle glaucoma. Br J Ophthalmol 1978;62:389–93.
3. Hitchings RA, Spaeth GL. Fluorescein angiography in chronic simple and low-tension glaucoma. Br J Ophthalmol 1977;61:126–32.

Sir,

We agree with Morsman that patients with raised intraocular pressure (IOP) must be monitored for changes in disc appearance or visual fields, whether or not optic disc pit (ODP) is present. However, our current understanding of the relationship between IOP, glaucoma and ODP-like lesions is imperfect.

Patients with chronic simple glaucoma or low tension glaucoma (LTG) may demonstrate angiographic sector disc hypofluorescence in the absence of an ODP, which suggests that glaucomatous optic nerve head (ONH) damage can be focal.[1] In a group of 232 glaucoma patients, Javitt *et al.*[2] found 51 patients had ODP-like lesions – a surprisingly high proportion given previous estimates of the prevalence as 1 in 11 000[3,4] – and there was a particularly high frequency in LTG (74%). Since both LTG and ODP exhibit visual field defect, focal loss of ONH tissue and 'normal' IOP, and since Javitt's paper did not document any field defect progression, some of these patients may represent congenital ODPs or acquired pit-like lesions unrelated to IOP. A review of the existing reports of acquired ODPs highlights the fact that most occurred in the context of normal or only slightly raised IOP and questions the role of IOP in the aetiology.[5]

Radius *et al.*[6] document the progression of ODPs in glaucoma patients. It should be noted that the size of congenital ODPs may also increase due to alterations in overlying glial tissue,[7] but in general congenital ODPs remain stable over time.[8]

It appears that there is a separate entity of an acquired focal defect of ONH tissue resembling congenital ODP, although the role of IOP and glaucoma in its pathogenesis remains uncertain. Distinguishing congenital ODP from glaucomatous cupping can sometimes be difficult and in doubtful cases long-term follow-up may be required to exclude progressive disc or field abnormalities.

M. Hingorani, FRCOphth
D. Mooney, MRCOphth
A. Singh, FRCS

Moorfields Eye Hospital
City Road
London EC1V 2PD
UK