Neuroimaging failed to demonstrate any intracranial or orbital lesions although the paranasal sinus mucosa was thickened, consistent with sinusitis. B-scan ultrasound confirmed the diagnosis of posterior scleritis, showing a diffuse posterior scleral thickening (2.4 mm). High-dose prednisolone (1 mg/kg) led to resolution of the disc swelling over the following week. The steroid doses were tapered and steroid-sparing immunosuppressants commenced.

Comment

Posterior scleritis is a rare condition notorious for its non-specific presentation leading to frequent misdiagnosis.^{2–4} Despite the negative c-ANCA, the likely systemic association in this case was thought to be 'limited' Wegener's granulomatosis, although the steroid-sensitive nature of the condition would seem to contradict this.

Posterior scleritis may be associated with disc swelling in up to 17% of patients. 5 Although visual loss is typically severe, posterior scleritis may also occur with normal vision. B-scan ultrasound is the key investigation in diagnosing the condition; it is non-invasive and readily available in most eye units. As in the previous case of toxoplasmosis and bilateral disc swelling, adjuvant signs should be closely examined for, as in this case the anterior scleritis suggested the diagnosis and in the former case the vitritis suggested the inflammatory aetiology.

Conflict of interest

The authors declare no conflict of interest.

References

- Sandfeld L, Petersen E, Sousa S, Laessoe M, Milea D. Bilateral papillitis in ocular toxoplasmosis. Eye 2010; 24(1):
- Benson WE, Shields JA, Tasman W, Crandall AS. Posterior scleritis: a cause of diagnostic confusion. Arch Ophthalmol 1979; 97: 1482-1486.
- Biswas J, Mittal S, Ganesh SK, Shetty NS, Gopal L. Posterior scleritis: clinical profile and imaging characteristics. Indian J Ophthalmol 1998; 46:
- 4 Watson PG, Hazleman B, Pavesio C, Green WR. The Sclera and Systemic Disorders, 2nd ed. Butterworth Heinemann: Oxford, 2004.
- McCluskey PJ, Watson PG, Lightman S, Haybittle J, Restori M, Branley M. Posterior scleritis: clinical features, systemic associations, and outcome in a large series of patients. Ophthalmology 1999; 106(12): 2380-2386.

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Response to 'Bilateral disc swelling: papillitis or posterior scleritis?'

We read with high interest the case report by Dr Stead et al,1 who describe a patient with bilateral optic disc swelling associated with anterior and posterior scleritis, presumably related to localized Wegener's granulomatosis, despite the absence of biological or pathological evidence of the latter condition.

Although we perfectly agree with the general comment that B-scan is a key examination to diagnose posterior scleritis, we strongly feel that our recently reported patient² had bilateral papillitis, rather than posterior scleritis. The patient, who presented with painless bilateral visual loss and no redness in the eye, had central scotomas and decreased colour perception. Except bilateral optic disc oedema, fundoscopy and fluorescein angiography disclosed no retinal or retinochoroidal involvement.

Pain, redness in the eye, anterior scleritis or uveitis, and retinal or retinochoroidal involvement (panuveitis, retinal folds, serous detachment, uveal effusion syndrome, etc) are the most important clinical signs indicating posterior scleritis.^{3,4} None of those signs were detected in our case with confirmed toxoplasmosis, which is known to cause only rarely scleritis.5 In addition, an orbital MRI with contrast disclosed no posterior scleral thickening or retrobulbar oedema, which is often seen in posterior scleritis with orbital CT or MRI.6

In the complete absence of all these clinical and radiological signs, we felt that posterior scleritis was unlikely to be present in our patient, although we cannot formally rule out some scleral involvement, which was undetectable by a thorough orbital MRI. In conclusion, we agree with Dr Stead et al that a B-ultrasonography should be performed in patients with clinical signs indicating the possibility of posterior scleritis, although this was probably not the case in our patient.

Conflict of interest

The authors declare no conflict of interest.

References

- Stead RE, Mokashi A, Subramaniam S. Bilateral Disc Swelling Associated with Posterior Scleritis. Eye 2010; 24: 1422-1423 (this issue).
- Sandfeld L, Petersen E, Sousa S, Laessoe M, Milea D. Bilateral papillitis in ocular toxoplasmosis. Eye 2010; 24(1): 188-189.
- Benson WE. Posterior scleritis. Surv Ophthalmol 1988; 32: 297-316.
- Biswas J, Mittal S, Ganesh SK, Shetty NS, Gopal L. Posterior scleritis: clinical profile and imaging characteristics. Ind J Ophthalmol 1998; 46: 195-202.
- Schuman JS, Weinberg RS, Ferry AP, Guerry RK. Toxoplasmic scleritis. Ophthalmology 1988; 95: 1399-1403.
- Osman Saatci A, Kocac N, Durak I. Magnetic resonance imaging characteristics of posterior scleritis mimicking choroidal mass. Eur J Radiol 2001; 39: 88-91.



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Sir, Neodymium:YAG laser peripheral iridotomy as a possible cause of zonular dehiscence during phacoemulsification cataract surgery

Zonular dehiscence during cataract surgery is usually associated with pre-existing weak zonules due to trauma and ocular or systemic diseases. ^{1,2} We report the case of a 73-year-old patient with bilateral zonular dehiscence during routine phacoemulsification possibly associated with the presence of bilateral neodymium:yttrium aluminium garnet (Nd:YAG) laser peripheral iridotomies (LPIs).

Case report

A 73-year-old Caucasian woman with bilateral cataracts was listed for surgery. Her ocular history included prophylactic bilateral Nd:YAG LPIs for narrow angles (Figures 1a and b). The laser treatment was performed 12 months earlier after acute intraocular pressure (IOP) elevation occurred bilaterally, following dilation with Tropicamide 1%. Her IOPs were normal and the rest of

the ocular examination was unremarkable. There was no history of trauma or known systemic disease that could predispose to zonular abnormalities.

During routine phacoemulsification, zonular dehiscence was observed at the stage of cortical aspiration, corresponding to the area of the LPIs (Figures 1c and d). Six months later, the other eye was operated on by a more experienced surgeon and extra care was taken to avoid a similar problem. Despite this, zonular dehiscence occurred at the same location and at the same stage of surgery (Figures 1c and d). A superior approach (10–11 o'clock position) was used and bimanual irrigation—aspiration was used in both surgeries. Posterior chamber intraocular lens implants were inserted in the capsular bag and no further intraoperative or postoperative complications occurred. Her best-corrected visual acuity was 6/6 bilaterally six months postoperatively.

Comment

The most common causes of weak zonular support are traumatic and iatrogenic zonulolysis, pseudoexfoliation syndrome, Marfan's syndrome, homocystinuria, Weil–Marchesani syndrome, aniridia, and intraocular neoplasm.¹ Zonular weakness has also been reported in retinitis pigmentosa and idiopathic cases.^{2,3}

In our case there was no history or signs of ocular trauma and no systemic or ocular disease linked to abnormal zonules. The patient had Nd:YAG LPI bilaterally for narrow angles and possibly intermittent angle closure glaucoma (ACG).

Spontaneous anterior crystalline lens dislocation has been reported after laser iridotomies in patients with narrow angles and pseudoexfoliation, retinitis

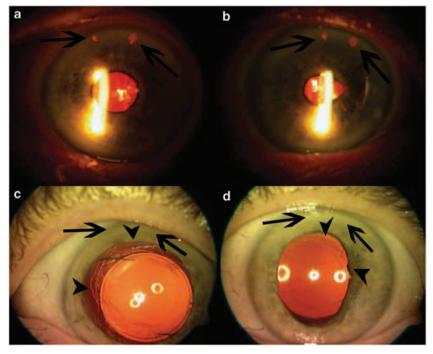


Figure 1 (a, b) Pictures of both eyes following surgery highlighting the location of the iridotomy sites (arrows). (c, d) Pictures of both eyes 4 weeks following phacoemulsification. Note the areas of zonular dehiscence superiorly and temporally (arrowheads) corresponding to the iridotomy sites (arrows—not visible because of the dilated pupil).