

Correspondence

Anterior chamber angle in the exfoliation syndrome

SIR, Wishart, Spaeth, and Bryzees¹ report an incidence of 14% of angle closure glaucoma among 76 patients with the exfoliation syndrome. They believe that earlier reports indicating no association between a narrow anterior chamber and the exfoliation syndrome represent incomplete observation.

I reported an association between angle closure and exfoliation syndrome in 1979.² In 1981³ I gave a full description of 13 patients with angle-closure glaucoma out of a total of 107 with glaucoma and exfoliation syndrome, 12%, a percentage similar to that of Wishart *et al.* I suggested a mechanism of 'iridocapsular' block and presented three patients cured by peripheral iridectomy, first described by Herbst,⁴ and one by mydriasis. I concluded that such cases would be discovered by better observation and therefore correct management would follow.

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SIR, We thank Dr Bartholomew for his interest in our article¹ and for drawing our attention to two of his earlier publications.^{2,3}

In the first of these two papers Dr Bartholomew reports an average fall in intraocular pressure following cataract extraction in seven patients with exfoliation syndrome and glaucoma. He suggests relief of iridocapsular block as a possible mechanism responsible for this fall in pressure. However, as no record of gonioscopic findings appears, this suggested mechanism remains conjecture and we fail to see the relevance of this to our results.

In the other paper to which he refers Dr Bartholomew describes 16 cases of acute glaucoma, 13 of which were ascribed to acute angle closure. The lack of details of material and method, the absence of information about the angle appearance in all patients included in this study, and the lack of explanation as to why peripheral iridectomy was such a rarely used treatment for acute angle closure all make it difficult for the reader to draw any conclusions from this

study about the anterior chamber angle in the exfoliation syndrome.

Dr Bartholomew's two papers are in support of the theory of iridocapsular block as a mechanism of glaucoma in the exfoliation syndrome. Our study was of the gonioscopic findings in patients with exfoliation syndrome and does not speculate on the possible dynamics involved in the production of angle-closure glaucoma.

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Angle closure following neodymium—YAG (Nd-YAG) laser capsulotomy in the aphakic eye

SIR, The Nd-YAG laser has gained popularity as a 'non-invasive' means of dividing intraocular membranes. Initial reports suggested that complications were rare.¹ Recently intraocular lens damage,^{2,3} rupture of the anterior hyaloid face,² corneal endothelial damage,³ and significant pressure rise^{2,4,6} have all been reported to follow Nd-YAG posterior capsulotomy in the aphakic eye. We wish to report a case in which Nd-YAG capsulotomy was followed by acute angle-closure glaucoma.

Case report

A 49-year-old woman underwent a planned, uncomplicated, left extracapsular cataract extraction for a unilateral lens opacity. A peripheral iridectomy was not performed. Postoperatively she received topical atropine and steroids for four weeks. She initially achieved a visual acuity of 6/9 with a contact lens, but one year later her corrected visual acuity fell to 6/60 owing to thickening of the posterior capsule. She declined further surgery. Three years after her operation she elected to have a Nd-YAG capsulotomy. No preoperative medication was administered. A Q-switched Nd-YAG laser (Cooper Vision) was employed in its burst mode, and a successful capsulotomy achieved with three bursts of four shots with a total energy delivery of 36 mJ. One drop of atropine 1% was instilled and she was allowed home.

Forty-eight hours later the patient presented with a 24-hour history of left painful red eye. Corneal oedema was present with an intraocular pressure (IOP) of 50 mmHg and minimal activity in the anterior chamber. The pupil was dilated, the anterior chamber was deep centrally but shallow peripherally, and the angle closed all round.

There was no iris bombé and no pupil block. Initial treatment comprised topical steroid and timolol with oral acetazolamide. This was unsuccessful. The addition of 2% pilocarpine 12 hours later successfully controlled the intraocular pressure. All treatment was stopped the following day, and the intraocular pressures remained at 14 mmHg. The drainage angle was wide open all round, and a mydriatic test performed two weeks later was negative. Her visual acuity improved to 6/9 with her contact lens and no visual field loss was detected.

To our knowledge angle closure, without pupillary block, following Nd-YAG laser capsulotomy has not previously been reported. A rise in intraocular pressure, which may exceed 50 mmHg, is a well documented complication of this procedure, but timolol and/or acetazolamide have hitherto been used successfully in treatment. Explanations which have been given for the pressure rise include diminished outflow facility resulting from deposition of debris in the trabecular meshwork⁴; neurovascular mechanisms⁵; trabeculitis as a result of the radiating shock wave⁶; and pupillary block.¹ In this case it was initially considered that inflammatory swelling of the ciliary body secondary to the pressure wave was the most likely pathogenetic mechanism of angle closure, which provided the rationale for the use of steroid. However, pilocarpine successfully reduced the intraocular pressure, implicating such mechanisms as angle crowding due to swelling of the iris root or ciliary body.

This report serves to illustrate that careful observation and follow-up is warranted for all patients undergoing Nd-YAG laser treatment to the eye, as hitherto unreported complications are likely to be observed when this novel treatment becomes more widely used.

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Book reviews

Chirurgie des Strabismes. By P V BÉRARD, M A QUÉRÉ, A ROTH, A SPEILMANN, M WOILLEZ. Pp. 470. 520F. Masson: Paris. 1984.

This large (470 page) book is a collaboration by five members of the Société Française d'Ophtalmologie all of whom are well known in the field of ocular motility and strabismus. As the title suggests, this is a large and compendious manual of surgical techniques and methods in strabismus and related conditions such as nystagmus. I could find no notable omissions, and in particular the diagrams and bibliography are excellent. The only major fault is one common to all books of this kind, that it is difficult for the unknowledgeable reader to get good advice on what procedure to choose in any particular clinical situation. Perhaps a little more attention could have been paid to the timing of surgery, especially in congenital esotropia, but nevertheless all the relevant authors are quoted.

This book deserves a good, sympathetic translation into English, as it represents the most complete listing of techniques in strabismus surgery currently available.

J P LEE

Hyaline Membrane Disease: Pathogenesis and Pathophysiology. Edited by LEO STERN. Pp. 297. £30.50. Grune and Stratton: London. 1984.

This monograph, which is of considerable value to the paediatrician and neonatologist, must be of limited interest to an ophthalmological readership. It provides a detailed up-to-date account of the pathogenesis, clinical features, and complications of this condition, with many eminent contributors. The book is subtitled pathogenesis and pathophysiology, and it is in this area that it makes its greatest contribution. The chapters on clinical management and follow-up are less comprehensive.

Although there is a section on pulmonary oxygen toxicity, there is scant mention of retrolental fibroplasia, which fails to feature at all in the index. The chapter on follow-up does mention that up to 32% of survivors of mechanically ventilated premature infants with birth weights of less than 1250 g may develop this condition, which remains a major hazard in the management of premature infants with hyaline membrane disease and other oxygen dependent conditions. It deserves greater emphasis in this text with at least a reference to its sister volume in this series of Monographs in Neonatology—Retrolental Fibroplasia, a Modern Parable by W A Silverman.

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