CORRESPONDENCE

Acute angle closure glaucoma: relative failure of YAG iridotomy

EDITOR,—The recent paper by Buckley and others¹ raises interesting issues with respect to the management of acute angle closure glaucoma. However, their conclusion may not be valid, namely '... it would appear that if there is a delay in presentation, especially in the elderly patient, surgical iridectomy should be given consideration as the first surgical option.'

Their data show that patients who had a Nd-YAG laser iridotomy as the initial procedure (YPI) had a significantly greater risk of needing a second surgical procedure (repeat YPI, surgical iridectomy, or trabeculectomy) when compared with patients who had a surgical iridectomy as an initial procedure. In the YPI group, logistic regression analysis showed that duration of the acute attack was the only variable for which there was any suggestion of an association with the need for further surgery (repeat YPI, surgical iridectomy or trabeculectomy). It does not follow that, if there is a delay in presentation, surgical iridectomy should be considered as the first surgical option, but rather 'a surgical procedure' (YPI, surgical iridectomy, or trabeculectomy).

The paper does not consider the advantages of peripheral iridectomy over trabeculectomy, but it might be suggested that in elderly patients with a delay in presentation, trabeculectomy should be undertaken as the first 'surgical' option. Based on their data, this seems to be a fair assumption – no cases that underwent trabeculectomy needed a second procedure and 82% were controlled without additional medication. Furthermore, this surgery was undertaken in patients with the longest duration of symptoms (and presumably in those with advanced chronic angle damage). Although malignant glaucoma has been reported as a complication of trabeculectomy in primary angle closure glaucoma in other studies, presumably this was not a problem in the cases in this series that underwent trabeculectomy.² (Table 2 – no patient underwent vitrectomy or vitreous aspiration.)

Because it is difficult to predict on presentation which patients with chronic angle closure glaucoma will subsequently require trabeculectomy, a well performed Nd-YAG laser iridotomy followed, if necessary, by medical therapy and trabeculectomy has been reported to be an effective method of dealing with this problem.^{3,4} However, in the light of the findings of their paper and in order to give clear guidelines on treatment of patients with acute glaucoma and a significant delay in presentation, a randomised prospective trial of surgical peripheral iridectomy versus trabeculectomy may be useful to provide guidelines on the treatment of these patients.

JOHN F SALMON
Oxford Eye Hospital,
Radcliffe Infirmary NHS Trust,
Woodstock Road,
Oxford OX2 6HE

1 Buckley SA, Reeves B, Burdon M, Moorman C, Wheatcroft S, Edelsten C, *et al.* Acute angle closure glaucoma: relative failure of YAG iridotomy in affected eyes and factors influencing outcome. *Br J Ophthalmol* 1994; 78: 529–33.

- 2 Watson PG, Grierson I. The place of trabeculectomy in the treatment of glaucoma. *Ophthalmology* 1981; 88: 175–96.
- 3 Salmon JF. Long-term intraocular pressure control after Nd-YAG laser iridotomy in chronic angle-closure glaucoma. *J Glaucoma* 1993; 2: 291–6.
- 4 Ritch R. The treatment of chronic angle-closure glaucoma. *Ann Ophthalmol* 1981; 13: 21–3.

Reply

EDITOR,—Our paper looks retrospectively at acute angle closure glaucoma (AACG) in four centres in England.¹ What is at issue here is why did the YAG laser iridotomies do less well than expected? We were able to compare surgical iridectomy with YAG iridotomy as both groups were similar for mean age, intraocular pressure, and duration of attack. These two groups accounted for the majority of patients presenting with AACG. Among these patients the longer the attack the less likely YAG iridotomy was to succeed.

We acknowledge that work on chronic angle closure glaucoma indicates that YAG laser iridotomy is useful in its management.² However, it appears that YAG iridotomy is not as reliable as surgical iridectomy in AACG. This could be as a result of iris and corneal oedema compromising the effect of YAG laser iridotomy. It is also postulated that surgical manipulation of the iris during iridectomy plays an important role in opening up the drainage angle.³

There was a significantly longer duration of attack in the trabeculectomy group when compared with surgical iridectomy. This different patient profile does not allow direct comparison and no conclusions can be drawn as to the advantages of one over the other. In addition, the small numbers of patients involved prevent confident statements about complication rates.⁴

Our paper showed that surgical iridectomy was more successful in the patient presenting late when compared with a similar patient undergoing YAG iridotomy. Therefore, the only recommendation we can make is that surgical iridectomy be considered more readily in the treatment of AACG.

We agree that a prospective study is necessary to answer any questions raised. Only then would information about the efficacy of YAG laser iridotomy, surgical iridectomy, and trabeculectomy in different clinical settings provide guidelines as to the most appropriate treatment in individual patients.

SALLY A BUCKLEY
Maidenhead,
Berks

- 1 Buckley SA, Reeves B, Burdon M, Moorman C, Wheatcroft S, Edelsten C, *et al.* Acute angle closure glaucoma: relative failure of YAG iridotomy in affected eyes and factors influencing outcome. *Br J Ophthalmol* 1994; 78: 529–33.
- 2 Salmon JF. Long term intraocular pressure control after Nd-YAG laser iridotomy in chronic angle closure glaucoma. *J Glaucoma* 1993; 2: 291–6.
- 3 Newhouse RP, Schutz S. Sector iridectomy in the management of prolonged attacks of acute congestive glaucoma. *Ann Ophthalmol* 1987; 19: 340–6.
- 4 Javitt JC. When does the failure to find a difference mean that there is none. *Arch Ophthalmol* 1989; 107: 1034–40.

NOTICES

Keratoconus Self Help and Support Association

For some time keratoconus patients at Moorfields Eye Hospital have met as a self help and support group. On 10 March 1994 this was formally constituted as the Keratoconus Self Help and Support Association. Mr Roger Buckley, MA, FRCS, FRCOphth, Director of Moorfields Contact Lens Department, accepted the Association's invitation to become its president. The Association aims to heighten awareness of keratoconus, its effects, and management, both within the medical and optical professions and generally. Funds are to be raised for publication of a pamphlet for this purpose. While the condition does not lead to blindness, for some the deterioration is such that a corneal transplant is the only option. Even then a contact lens may still be needed. There will be active support for research, regular meetings, and other activities including fundraising and a newsletter. Links are already being established with related societies and associations. Nor will the Association lose sight of its principal purpose, help and support for keratoconus sufferers. All keratoconus sufferers are welcome to join and associate membership is open to any interested non-sufferer. Further details: Mike Oliver (chairman), 39 Eversley Road, London SE7 7LF.

Office of Continuing Medical Education

A course entitled '1995 Update in the Management of Age-Related Macular Degeneration' will be held on 21 January 1995 at the Thomas B Turner Building, Johns Hopkins Medical Institutions, Baltimore, Maryland, USA, sponsored by The Wilmer Ophthalmological Institute of Johns Hopkins Medical Institutions. Further details: Program Coordinator, Johns Hopkins Medical Institutions, Office of Continuing Medical Education, 720 Rutland Avenue, Turner 20, Baltimore, MD 21205-2195, USA. (Tel: (410) 955-2959; Fax: (410) 955-0807.)

Photonics West '95

The International Society for Optical Engineering (SPIE) will hold a conference entitled 'Photonics West '95' on 4–10 February 1995 at the San Jose Convention Center, San Jose, California, USA. This meeting consolidates three established California meetings, OE/LASE, Biomedical Optics, and the IS&T/SPIE Symposium on Electronic Imaging Science and Technology. Further details: SPIE, PO Box 10, Bellingham, WA 98227-0010, USA. (Tel: 206/676-3290; Fax: 206/647-1445.)