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Sir,

Reply: the Ahmed glaucoma valve in refractory glaucoma: experiences in Indian eyes

We thank Cheng *et al* for their interest in our article entitled 'The Ahmed glaucoma valve in refractory glaucoma: experiences in Indian eyes'.

The fundamental difference between the two studies^{1,2} appears to be a variation in the surgical technique. The dissection of the scleral flap was the only major surgical modification of the technique that was different from the procedure described in the studies performed previously.^{2,3} Although the scleral dissection was not as deep as it is in nonpenetrating deep sclerectomy (NPDS) in our study,¹ in most cases the flap was between twothirds to three-fourths of the scleral thickness, so as to provide adequate support to the AGV tube. This was the basis of our postulation that egression of aqueous from the scleral flap and bed,⁴ as is seen in a trabeculectomy, may have contributed to the blunting of the 'hypertensive' phase. This, however, remains a nonmeasurable compounding factor, which had no adverse outcome on the postoperative behaviour of the patient's intraocular pressure (IOP). Even if we assume

that both, the egression of aqueous from the scleral bed and the drainage through the AGV implant, contributed to the reduction in the IOP, the effect was better control of the same in the postoperative period, which was desirable. However, this query provides food for thought for a future randomized prospective comparative study where the implant is inserted under a scleral flap (measured depth) and under a donor corneoscleral graft so as to come to a solution to this clinical dilemma.

Encapsulated blebs were not encountered in our study as a cause of failure. We have mentioned in the article that this could probably be due to a shorter recorded follow-up period or probably a less aggressive tissue healing process in Indian eyes.¹ The latter hypothesis is presumptive and would need substantiation by further randomized trials taking into account the response to surgery in different races. Most of the cases classified as 'failures' in our study were patients with refractory and complicated glaucomas (neovascular, aphakic, postuveitic, congenital, etc) and the cause of failure was due to inadequate control of IOP in spite of maximum medical therapy as defined in our success criteria.¹ Another important difference between the two Asian studies^{1,2} on AGV implantation in refractory glaucomas that we thought should be highlighted is that the patient groups in the two studies were different. The most common diagnosis in the study by Lai et al² was neovascular glaucoma while that in our study was failed trabeculectomy in primary glaucomas.¹ This could also have contributed to a different pattern of cases classified as failures in the two studies.

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Sir,

Surgical management of iris defects with prosthetic iris devices

We read with interest the article by Mavrikakis *et al (Eye* 2005; **19**: 205–209) on the surgical management of iris defects with prosthetic iris devices. In this case series, the authors presented nine patients with iris defects managed by prosthetic iris device with excellent results. While we share the same experience with the authors that large iris defect like those with more than 90° are most effectively managed by prosthetic device. Small iris defect (less than 90°) may benefit from pupilloplasty. After pupilloplasty, the pupil may be slightly displaced but this can be managed by selective sphincterotomy at the opposite iris margin to achieve a well-centred pupil.

Sphincterotomy can be achieved by cutting the iris margin with vennas scissors or simply stretching the iris margin with iris retractors. While this approach may be associated with slightly more early postoperative inflammation due to iris manipulation, the inflammation typically settles in the first week. This method particularly useful in patients without an intact capsule in which iris prosthesis cannot be placed. This technique can also avoid migration the iris prosthesis as the capsular bag contracts.

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Sir,

Reply: Surgical management of iris defects with prosthetic iris devices

We thank Drs Cheng, Yuen, Rao, and Lam for their comments on alternative surgical procedures for correction of small iris defects (less than 90°). We agree that pupilloplasty using a McCannel suture is an established technique for correction of small iris defects, but it is not without shortcomings. As they very correctly mentioned in their letter, pupilloplasty may be associated with early postoperative inflammation and an ectopic pupil. Although the postoperative inflammation could be settled with intensive use of topical steroid, the ectopic pupil needs to be corrected, as they pointed out, with multiple selective sphincterotomy. This has disadvantages such as hyphaema, uveitis, photophobia, and loss of iris tone. Thus, it is our departmental policy not to perform such sphincterotomy. Secondly, pupilloplasty may leave a gap at the iris root resulting in glare or monocular diplopia. Thirdly, while we agree that pupilloplasty may be useful in patients without an intact capsule, in our series all cases with small iris defects had an intact capsule and therefore received an artificial iris device (Morcher coloboma diaphragm Type 96G). Finally, the issue of decentration of the artificial iris due to capsular bag contracture has been addressed within the context of the article by the use of a capsular tension ring.

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