oculoemetic reflex, despite previous reports including those by Cousins and Bridenbach[3] of these reflexes occurring up to 1–11 2 h after retrobulbar blockade. We have, however, previously recorded a zero incidence of vomiting in a group of patients in whom sub-Tenon's blocks were not routinely used.[4] We are therefore currently commencing a formal double-masked study in paediatric patients to investigate the importance of the anti-emetics in our anaesthetic protocol in producing our low incidence of vomiting to date. We look forward to the results from Dr Allen's study with great interest.

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Sir,

We thank Dr Fry for his interest in our paper and congratulate him on the very low incidence of post-operative vomiting following strabismus surgery in his unit. Whilst the use of systemic anti-emetics such as ondansetron and metoclopromide certainly reduces the incidence of this complication, their cost and potential to cause side-effects in children limit their routine use in the UK. Prolonged post-operative nausea can be just as unpleasant for the patient as vomiting, and we feel that it is important to assess its incidence and severity when comparing anti-emetic regimens.

In theory, sub-Tenon's anaesthesia may obviate the need for systemic anti-emetics by the blocking of the oculocardiac reflex. Our current study is a formal, double-masked controlled trial in which the incidence and severity of post-operative nausea and vomiting in children receiving sub-Tenon's anaesthesia is compared with that in patients receiving our standard anaesthetic regimen (which does not include a prophylactic systemic anti-emetic agent). Since Dr Fry's study will compare the efficacy of sub-Tenon's anaesthesia with prophylactic systemic anti-emetic agents, the two studies should complement each other and we look forward to hearing Dr Fry's results.

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Sir,

We read with interest the recent paper by Zambarakji *et al*.[1] The authors claim that silicone implants produce a more pronounced degree of capsulorhexis phymosis following phacoemulsification.

This claim is based firstly on the fact that capsular areas in patients with silicone implants were significantly smaller at 6 weeks and 6 months than in those with PMMA implants. However, from the data it would appear that patients with a silicone implant had a smaller mean capsular diameter *at the outset* (4.52 ± 1.24 mm at day 1) compared with those with a PMMA lens (5.10 ± 1.00 mm). Has this been taken into account? A smaller capsulorhexis may in itself increase fibrosis due to the larger number of remaining anterior capsule epithelial cells, as these cells play a role in capsule fibrosis.[2]

Secondly the authors have compared the *percentage change* in capsule reduction over the two time intervals studied between the two lens types. They appear to have performed a direct statistical comparison of these two percentages (their Table 1) – an analysis which is unorthodox and inconclusive.

In addition it is not stated whether patients were randomised to each of the two surgeons or indeed if the type of lens implanted was randomly allocated. Given that the procedure of capsulorhexis is an idiosyncratic one, the behaviour of the anterior capsule may be affected by the surgeon rather than the IOL type.

Finally it is difficult to directly compare the two lenses, the PMMA lens used being a rigid one-piece lens with a 5 × 6 mm haptic whereas the silicone IOL used was foldable with a larger optic size. Several variables are at play regarding the effect of these lenses on the tensile forces within the capsular bag (Gonvers *et al*.[3] appear to demonstrate an increased constriction of capsulorhexis with a plate rather than loop haptic), so any significant difference between lenses may be due to IOL design rather than composition.

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Sir,

We thank Walsh *et al*. for their comments on our paper.[1] Our study[1] is purely an observational study. We have measured the rate of anterior capsular contraction following uncomplicated phacoemulsification surgery, and observed that this is greatest during the first 6 weeks following surgery even when measured in percentage per 6 weeks. If instead we measure the change in square millimetres, then there would still be a decrease, and the contrast (between the first 6 weeks and the following 41 2 months) would be greater because x% of a large area is more square millimetres than x% of a smaller area.

The authors do not claim that silicone implants produce a greater degree of capsular phymosis; indeed the phenomenon of capsular phymosis is a multifactorial one.[2,3] This may be affected by the surgical technique, as well as factors relating to the patient and intraocular lens (IOL). We have therefore attempted to eliminate patient factors by excluding those with a history of diabetes, glaucoma, pseudoexfoliation, ocular inflammation

or other forms of ocular co-morbidity. We have also standardised every step of the surgery, although this was performed by two surgeons. We have measured the percentage change in capsular opening as it would be difficult to start with two groups (PMMA one-piece and silicone/polypropylene haptics) having exactly the same capsular size openings. Other studies that looked at the phenomenon of capsular phymosis have used the index (%) of size[4] and the relative change in the capsulorhexis surface (%)[5] as the starting capsular areas were also different at the outset. The measurement of the reduction in the capsular opening in our study[1] is similar to using the index of size where the starting capsular area has an index of size of 100%. This is a perfectly valid mathematical method for analysing change (reduction in the capsular area expressed as a percentage).

Although the primary goal of the study was to assess the rate of capsular shrinkage, we have extended the analysis to compare capsular shrinkage for the two IOL types used. This is possible if we can control for all other factors involved. There are various theories to explain the phenomenon of capsular phymosis including zonular weakness, the degree of fibrotic reaction caused by residual lens epithelial cells and IOL structure and resistance to compression.[3] Apple *et al*.[6] have clearly demonstrated that three-piece IOLs with polypropylene haptics lack the rigidity and retention of memory seen with one-piece PMMA IOLs. Polypropylene loops do not re-expand and are more subject to compression and distortion. Gonvers *et al*.[5] observed an increase in capsulorhexis constriction with a plate haptic silicone IOL compared with the one-piece PMMA and three-piece silicone optic/PMMA haptic IOLs. The constriction observed was therefore attributed to the plate haptics. At the time of our study, silicone IOLs with PMMA haptics were not available to us.

Although the primary goal of our study was to describe the magnitude of change of the capsulorhexis area following uncomplicated phacoemulsification cataract surgery, our data also suggest that capsulorhexis phymosis is greatest with three-piece IOLs with polypropylene haptics in 'non-predisposed' eyes.

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