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Sir,

I read with interest the article by Williams *et al.*¹ regarding the outpatient management of small traumatic hyphaema.

I would especially applaud these authors' specific qualification of the necessity for 'compliance' for patients to be treated without hospitalisation. The mean age of their patients was 28.7 years and the youngest was 10 years of age. I believe that children certainly should be considered for hospitalisation, regularly, because of the strong possibility of their non-compliance, the risk of re-injury by a sibling, and/or the inability of the parents to enforce or comply with the treatment regimen. The physician remains responsible for the final outcome even if the patient is non-compliant.

Of special interest was the authors' justification of their choice of outpatient treatment on the basis of cost. They did not use a control group. They do not mention surgery being required in rebleeds or whether anyone lost vision. They imply, therefore, that they were fortunate in apparently having no serious complications in their series. (Several previously reported series do, however, in contrast, show a low correlation between the size of the hyphaema, complications, and final outcome.)

In another series previously reported² I worked through the economics, in the United States, and on the basis of our costs strongly recommended that hospitalisation, at least for children, in combination with systemic antifibrinolytic agents or steroids be routinely used, as the computed cost benefits alone far outweighed the costs and risks of hospitalisation and treatment.³

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2. Kennedy RH, Brubaker RF. Traumatic hyphema in a defined population. *Am J Ophthalmol* 1988;106:123-30.
3. Romano PE. Misinterpretation of Mayo Clinic data concerning traumatic hyphema in Olmsted County. *Binocular Vision* 1989;4:39-42.

Sir,

We thank Dr Romano for his interest in our recent paper.¹

Our aim was prospectively to follow the clinical course of carefully selected patients with small traumatic hyphaemas who recuperated at home. We compared the incidence of rebleeding in this group with published figures for hospitalised patients. We were not conducting a cost-effectivity study on the management of small traumatic hyphaemas, nor a trial comparing one treatment with another. Such studies would be designed differently and because of the relative scarcity of the condition would have to be multi-centre.¹ Cost-effectivity analyses such as that in Dr Romano's² paper require specific study design and data collection, and therefore would be inappropriate for our data.

Steroids and/or antifibrinolytics have not been employed in the routine management of patients with small traumatic hyphaemas presenting to this unit and so were not included in our protocol. The variables we studied were the complication and attendance rates in patients allowed home rather than admitted for bedrest, other aspects of their treatment being comparable to our normal practice.

Dr Romano suggests that the potential costs of surgery for patients sustaining vision-threatening complications should have been included when considering the management costs of patients with small hyphaemas. We are not aware of any studies which have shown that ambulant outpatients with small hyphaemas have a significantly greater risk of complications than hospitalised bed-bound patients. The potential surgical costs would not therefore be expected to be greater in an ambulant outpatient group than in bed-rested inpatients and were not discussed. The figures we quoted were to illustrate the respective costs of an inpatient stay and a visit to casualty and were not presented as being the final calculated costs of managing our patients.

We agree with Dr Romano's concerns about compliance. As we stated in our paper: 'increased patient convenience and cost saving must be balanced against the high non-attendance rate amongst patients.'

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