Sir,
Preschool vision filtering and amblyopia

We read with interest your articles by Searle *et al*¹ and Gregson,² with respect to amblyopia treatment and compliance. We appreciate that there is a need to improve compliance and 'self-efficacy' with respect to patching. In Searle *et al*'s study population, the mean visual acuity at first assessment was 6/24, which he had alluded to as being severe, substantial visual loss. Further, preschool children with amblyopia have been shown to be at risk for further deterioration.³ For these reasons, we feel it is important to detect amblyopia early.

Recent UK guidelines⁴ have advised that all children be screened before 5 years of age. The French Health Authorities have instituted offering vision screening at 9 months to all infants, as they found that at 9 months, infants were more responsive to the acuity card procedure; further they complied more easily with orthoptic and ophthalmic examination than at a later age. In addition to this, occlusive treatment before 1 year of age has been shown to be more acceptable, with better compliance and a shorter occlusion period, making it more efficient.⁵

Compliance has been stated to be the most critical factor for predicting a successful outcome⁶ with parental nonconcordance and response efficacy having a negative impact.^{1,7} Searle *et al* argue that the decision to postpone screening until 5 years of age may be premature in the light of poor compliance and not a result of ineffective treatment. Can we achieve better compliance by early recognition and parental education? It is interesting to note that in the same study, 73% of the children had a family history of amblyopia.

Since 1989, Coventry has an effective preschool vision filtering programme. It allows for opportunistic assessment or self-referral to a community orthoptist. The attendance rate averages 70%. In all, 880 children are screened annually in the programme. Approximately 20% of children screened are identified as strabismic or anisometropic amblyopes and referred for further assessment to the Paediatric Eye Clinic. Other ocular pathology identified included epiphora (2.7%), nystagmus (1.1%), and an abnormal red reflex (0.8%).⁸

We contend that the benefits of preschool filtering should not be overlooked as a valuable aspect of the future provision of children's eye services. While it is important to treat amblyopia effectively, it is also important to detect it early. Besides amblyopia, decreased vision due to refractive errors, strabismus or ocular pathology must be included in any analysis

of the cost effectiveness of preschool vision filtering. Where existing effective pre-school programmes exist, these should not be replaced with the year-5 screening programme; they should run together for the benefit of all young children and not just those of school age.

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Sir,
Reply to preschool vision filtering and amblyopia

We agree with Mowatt *et al* that compliance with occlusion is often better in younger children. Although vision testing at school entry is easier, coverage is higher, and treatment of amblyopia is still

feasible, occlusion during school hours is not always practical and poor compliance can adversely affect outcome.

Early detection and treatment of amblyopia before the age of 3 years has been shown to improve outcome (compared with screening at 3 years) but an RCT of preschool vision screening (PS VS) against screening at school entry has yet to be carried out and at present there is no evidence that such a programme would be beneficial.¹ Comparison of visual outcome between children offered PS VS at aged 3 years and those screened at school entry showed no benefit of PS VS.²

However, as has been argued, lack of evidence that screening works is not necessarily reason to abandon it.³ Indeed, it should be a spur to encourage efforts both to improve existing programmes and measure their efficacy.

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Sir,
Severe sub conjunctival haemorrhage following intravitreal triamcinolone for refractory diabetic oedema

The procedure of intravitreal triamcinolone injection has potential risks such as retinal detachment, vitreous

haemorrhage, and endophthalmitis. We report a case of severe subconjunctival haematoma that developed following intravitreal triamcinolone injection.

Case report

A 67-year-old man with a 4-year duration of insulin-requiring diabetes presented to our diabetic retinopathy clinic. He was a nonsmoker, normotensive but required atorvastatin for dyslipidaemia. Medication also included warfarin for a metallic aortic valve replacement. Best-corrected vision was 6/6 and 6/9 in the right and left eye, respectively. Fundal examination revealed right moderate diabetic maculopathy and left clinically significant macular oedema (CSMO) as per ETDRS guidelines.¹ The left macular was treated with focal argon laser treatment. Vision in the right eye deteriorated and subsequently 1 year, then 2 years later he underwent focal and grid argon laser for right CSMO. At 11 months after the second laser treatment right vision remained at 6/36 (LogMar 0.50), N8 secondary to refractory cystic macular oedema. Right fundus fluorescein angiography showed no significant macular ischaemia however, diffuse macular leakage was present and late staining from perifoveal scars was noted. The patient underwent a right intravitreal 4 mg/0.1 ml triamcinolone injection. This was done under direct visualisation through a pharmacologically dilated pupil. A transconjunctival inferotemporal approach 4 mm posterior to the limbus was used with a 29G 3/4 inch needle. No aqueous or vitreous aspiration prior to injection was performed. At the time of injection, a small subconjunctival haemorrhage was noted. After 2 days, the patient presented with a localised subconjunctival haematoma that prevented complete lid closure. No intravitreal haemorrhage was seen. Topical lubricants were prescribed to ensure the conjunctival surface remained moist and an eye shield given to prevent accidental conjunctival surface trauma. The international normalised ratio before and after the intravitreal injection remained at less than 2.8. Over the next 7 days, the haematoma increased in size and the overlying conjunctival became necrotic (Figure 1). Exploration of the site of injection was performed. Friable, necrotic tissue and haematoma was excised to the limit of healthy conjunctival tissue. The lateral rectus was intact and no active bleeding point at the site of injection noted. A bare area of sclera was allowed to heal and within 2 weeks this was covered by healthy conjunctiva (Figures 2 and 3) without further bleeding complications. Histology of the excised tissue was in keeping with an underlying haematoma.

At 3 months after the intravitreal injection best-corrected right vision had improved to 6/12 (LogMar 0.3), N6, with subtotal resolution of the macula oedema.