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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Eye (2005) **19**, 589–590. doi:10.1038/sj.eye.6701506
Published online 8 April 2005

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.

Comment

Intravitreal steroid injection appears to be effective for some cases of refractory diabetic macular oedema that

Figure 1 Clinical photograph showing large right subconjunctival haematoma with overlying necrotic conjunctiva.

Figure 2 Fluorescein stained bare area of sclera following haematoma excision.

Figure 3 Healed ocular surface 2 weeks after haematoma excision.

persists despite prior treatment with argon laser photocoagulation.^{2–4} In our patient, visual acuity improved following intravitreal triamcinolone but, a large, subconjunctival haematoma developed at the injection site. Despite lubricants the exposed conjunctiva became necrotic and required surgical excision. Injection-related complications include retinal detachment, vitreous haemorrhage altered intraocular pressure response, cataract progression, and endophthalmitis.^{2,4} We recommend that the risk of subconjunctival haematoma formation be explained to patients requiring intravitreal triamcinolone injection, especially if anticoagulants such as warfarin are prescribed. If the haematoma fails to resolve, exploration of the injection site and removal of necrotic tissue may be necessary.

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Eye (2005) **19**, 590–591. doi:10.1038/sj.eye.6701529
Published online 20 August 2004