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electron-dense particles between them. Since the syndrome is genetically heterogeneous, this finding may not be generally applicable.

In literature, several developmental theories have been proposed for the pathogenesis of Peters' anomaly, and none of them explains all the clinical and histopathologic findings in all forms of Peters' anomalies.<sup>2</sup> A failure of neural crest cell differentiation destined for corneal endothelium and Descemet's membrane is considered the most reasonable explanation for the keratolenticular or iridocorneal adhesion. We propose that these villus-like processes might represent the developmental remnants that fail to regress while corneal endothelium separates from the underlying lens epithelium.

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### Sir,

# Progression of diabetic retinopathy following coronary artery bypass graft

We read with interest Mansour *et al*'s<sup>1</sup> paper highlighting the risk of anterior ischaemic optic neuropathy (AION) in diabetics after coronary artery bypass graft (CABG) surgery. We present a diabetic patient who suffered significant loss of vision owing to rapid progression of retinal ischaemia following CABG.

A 58-year-old man was diagnosed with mild nonproliferative diabetic retinopathy (NPDR) in October 2002. His vision was 6/6 in both eyes. In July 2004, his vision decreased to 6/18 in the right eye and 6/9 in the left eye. A fundus fluorescein angiogram (FFA) detected ischaemic maculopathy in both eyes (Figure 1.) Six months later he developed new vessels in the left eve and had two sessions of panretinal photocoagulation. His vision at this stage was 6/12 in both eyes. Two months later he underwent a threevessel CABG. The preoperative haematocrit was 0.432. Postoperatively the lowest haematocrit was 0.164. The patient received one unit of packed red blood cells. The surgery and postoperative period was uncomplicated. Six weeks following the surgery his vision reduced to 6/60 in his right eye and 6/24 in left eye. Clinically the right eye had severe NPDR. The left eye showed new vessels at the disc. Both discs were healthy. FFA showed large areas of capillary dropout and increased macular ischaemia (Figure 2). Two months later his right eye developed rubeotic glaucoma causing the vision to drop to hand movements. Since then he has had extensive panretinal photocoagulation in both eyes and cycloablation of the ciliary body in the right eye. At present he has no perception of light in the right eye and hand movements in the left.

The retinal ischaemia in this patient was probably precipitated following CABG. It may be argued that his retinopathy was progressing preoperatively and may have



Figure 1 FFA of the left eye showing ischaemic maculopathy.





**Figure 2** FFA of the left eye after CABG showing a significant increase in ischaemia. New vessels are also present at the disc.

followed a similar course irrespective of the cardiac surgery. However, we believe that the decreased tissue perfusion and postoperative anaemia resulting from the CABG accelerated the progression of his retinal vascular disease. Anaemia is a well-known risk factor for progression of diabetic retinopathy<sup>2</sup> and is likely following aggressive haemodilution for CABG. This case highlights the risk of such a procedure to diabetic retinopathy. Such high-risk eyes should undergo extensive panretinal photocoagulation before any procedure necessitating general anaesthesia or anticoagulation. As with AION,<sup>1</sup> aggressive anaemia therapy may well prove to be beneficial in slowing progression of retinal ischaemia in diabetics undergoing CABG.

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#### Sir,

## Eye rubbing causing conjunctival graft dehiscence following pterygium surgery with fibrin glue

The etiopathogenesis and surgical management of pterygium has intrigued surgeons for many years. Although different surgical modalities have been described pterygium excision with conjunctival autograft has been shown to the most safe and effective method.<sup>1</sup> Fibrin glue is a safe and effective alternative to sutures in attaching the conjunctival autograft.<sup>2,3</sup> We report the clinical features and management of conjunctival graft dehiscence a previously unreported complication with the use of fibrin glue during pterygium surgery.

## Case 1

A 53-year-old male was referred with a growing pterygium in his right eye (OD). He had previously undergone pterygium surgery in the left eye (OS). He had a right nasal pterygium extending 3 mm in to cornea. Following informed consent he underwent right pterygium excision with a free conjunctival limbal autograft (CLAG) harvested from the superotemporal bulbar conjunctival under topical and subconjunctival anaesthesia. The CLAG was secured using a commercially available fibrin sealant (Tisseel Kit VH, 1.0 ml, Baxter, Canada). There were no intraoperative complications. On the first operative visit (postoperative day 3) conjunctival graft dehiscence was noted with all four margins of the graft displaced from the underlying scleral bed (Figure 1, top left). He admitted to premature removal of the eye pad and intense rubbing of the operated eye. Under topical anaesthesia multiple interrupted 10-nylon sutures were used to secure the displaced CLAG. At 8 months follow-up the graft appeared to be well healed with no recurrence of the pterygium (Figure 1, bottom left).

## Case 2

A 73-year-old female was referred with a growing pterygium in her OD. Examination revealed bilateral nasal pterygium, with the right pterygium extending 2.75 mm in to the cornea. Following informed consent she underwent pterygium excision with CLAG in the OD. The CLAG was secured in place with fibrin glue. There were no intraoperative complications. On follow-up visit (postoperative day 3) she was noted to have an inflammed, partially dehisced CLAG, with exposure of the underlying scleral bed. (Figure 1, top right). Under topical anaesthesia the graft was refloated