

synthetic fibre granuloma should be included in the differential diagnosis of children presenting with or found to have a conjunctival mass or 'pigmented' lesion, 'peculiar' discharge and, of course, presumed conjunctivitis nodosa.

Y. F. Yang  
C. R. H. James  
Department of Ophthalmology  
Torbay Hospital  
Torquay TQ2 7AA  
UK

Correspondence to:  
Y. F. Yang  
Moorfields Eye Hospital  
City Road  
London EC1V 2PD  
UK

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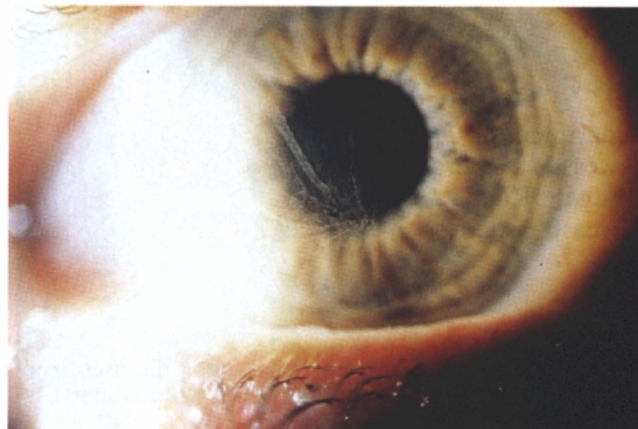
Sir,

#### **Vortex Keratopathy Associated with Ibuprofen Therapy**

Ibuprofen is a non-steroidal anti-inflammatory drug used in various rheumatological disorders for its analgesic and anti-inflammatory properties. We present a case of vortex keratopathy (cornea verticillata) occurring during treatment with ibuprofen, an association which has not, to the best of our knowledge, been recognised previously.

#### *Case Report*

A 62-year-old woman presented to the eye casualty department in 1995 with a 4 week history of bilateral visual disturbance consisting of haze and coloured haloes. She was previously on no medication and her symptoms had started within days of commencing treatment with oral ibuprofen, 400 mg three times



**Fig. 1.** Typical vortex keratopathy at time of presentation.

daily, prescribed for a minor neck injury. She was otherwise well with no significant past medical history.

Examination revealed a typical, bilateral, symmetrical vortex keratopathy (Fig. 1). Her visual acuities were 6/5 in both eyes and ocular examination was otherwise unremarkable. It was assumed that the corneal changes were associated with her drug therapy, which she therefore stopped immediately. On review 3 weeks later, both her symptoms and signs had resolved entirely.

#### *Discussion*

Vortex keratopathy (cornea verticillata) consists of a whorled arrangement of intracellular deposits in the corneal epithelium. It occurs classically in patients on amiodarone and in Fabry's disease, but has also been reported in association with phenothiazines, anti-malarials and the non-steroidal anti-inflammatory drugs indomethacin and naproxen.<sup>1,2</sup>

Various theories have been offered to account for the striking appearance. Recent evidence suggests that the pattern reflects normal epithelial cell migration which occurs both centripetally from and circumferentially at the limbus.<sup>3</sup> It has also been postulated that the path taken may be influenced by local factors such as the architecture of Bowman's membrane<sup>4</sup> and electromagnetic fields in the eye.<sup>5</sup> The nature of the deposits remains unclear, although the identical appearance of the keratopathy in Fabry's disease suggests that they may represent drug-induced sphingolipidoses.<sup>6</sup>

#### *Conclusion*

Two non-steroidal anti-inflammatory drugs have previously been implicated in iatrogenic vortex keratopathy, and ibuprofen would appear to be a third. Although rarely significant, it should be borne in mind when patients on similar treatments complain of visual disturbance.

A. Fitt, FRCOphth  
M. Dayan, FRCOphth  
R. F. Gillie, FRCS, FRCOphth

Department of Ophthalmology  
Newcastle General Hospital  
Westgate Road  
Newcastle upon Tyne NE4 6BE  
UK

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Sir,

### Fluorescent Venogram? An Interesting Side Effect of Fluorescein Angiography

An 80-year-old man with a subretinal neovascular membrane was seen in our clinic for fluorescein angiography. Five millilitres of 10% sodium fluorescein was injected prior to photography. After the procedure it was noted that the vein into which the fluorescein had been injected was a startling fluorescent green colour (Fig. 1). The patient was otherwise well, and the colour of the vein returned to normal after about 24 hours. There was no localised or systemic adverse reaction.

A similar reaction was observed in an 82-year-old diabetic woman with macular oedema. The fluores-



**Fig. 1.** Photograph of the arm of an 80-year-old man following intravenous fluorescein injection.

cent nature of the vein was demonstrated by shining a blue cobalt light from a slit lamp onto it.

Transient generalised skin discoloration after fluorescein injection is very common and may be misdiagnosed as jaundice by the unwary. Such confusion was not a problem in our reported cases!

Manoj Kumar Kulshrestha  
Richard Goble  
Jonathan Gibson\*  
Mark Benson

Birmingham Heartland's Hospital  
Bordesley Green East  
Birmingham B9 5SS  
UK

\*To whom correspondence should be addressed.

Sir,

### Koby's Superficial Reticular Degeneration of the Cornea

Koby's superficial reticular degeneration of the cornea (SRD) is a bilateral condition characterised by a net-like mosaic of discrete white lines at the level of Bowman's membrane. It was originally described in 1927<sup>1</sup> and there are only two cases reported in the English literature.<sup>2,3</sup>

### Case Report

A 56-year-old Caucasian man was referred to the Sussex Eye Hospital by his optician who had noticed 'media opacities' during retinoscopy. The patient was asymptomatic and had no relevant ocular, family or past medical history. His visual acuities were 6/6 in each eye. A fine white reticulum was noted in the central cornea at the level of Bowman's membrane, in both eyes (Figs. 1, 2). Ocular examination was otherwise normal, in particular corneal sensation, epithelium, remaining stroma and endothelium. Serum calcium, parathyroid hormone and angiotensin-converting enzyme levels were normal, as was his chest radiograph. No treatment was indicated. His only surviving relative had clear corneas.

### Discussion

The first case of this rare progressive corneal degeneration, described by Koby in 1927,<sup>1</sup> was additionally characterised by an epithelium which became thickened and speckled by a brown discoloration, contrasting with the white reticulum. It developed without inflammation or pain, but caused progressive loss of vision. Following this report there was some doubt concerning the separate existence of such a condition and some authors suggested it was merely a variant of lattice dystrophy.<sup>4,5</sup> Indeed the illustrations in Koby's paper closely resemble lattice, as do those in a later study of this condition.<sup>6</sup> In a