CASE REPORT

Dr Revathi Rajaraman

Professor of Ophthalmology
Aravind Eye Hospital
Coimbatrore
Tamil Nadu
India

Steve Thomson

Haag-Streit AG
Gartenstadtstrasse 10
Koeniz - Bern
Switzerland

Multiple Foreign Body Injury

Mr. R, a 39 years old male, presented on 3rd June 2006 with a red, painful left eye. He reported a foreign body sensation following an accident at work. He is employed as a quarryman and had been blasting and cutting rocks. No eye protection was used. He had a past history of similar injury in the right eye eight years previously.

On examination, the right eye achieved a best-corrected visual acuity of 6/9 and left eye of 6/36. On slit lamp examination of the right eye, multiple foreign bodies were observed embedded in the corneal stroma and lens, an old posterior synechiea was noted in an otherwise quiet right eye. The left eye displayed multiple conjunctival and corneal foreign bodies, cells in the aqueous and multiple small tears in the iris sphincter, along with a mid-dilated pupil. The lens was clear in the left eye and in both eyes the posterior segments were normal in direct visualisation and by ultrasonic B-Scan.

Mr. R was treated with topical Moxifloxacin and Prednisolone Acetate eye drops six-hourly and Homatropin eye drops eight-hourly, tapered over four weeks.

On review after five weeks, the visual acuity in the left eye improved to 6/12 and the eye was quieter.

The images were taken one day after injury to the left eye and eight years after injury to the right. Diffuse overview images (Figures 1,2) clearly show multiple intra corneal foreign bodies in both eyes. The slit image (Figure 3) of the left eye demonstrated several corneal foreign bodies and a few anterior chamber flare cells. Using a slightly wider slit, and focusing the slit lamp in the anterior chamber, (Figure 4) better illustrates the volume of inflammatory cells present.

Retro-illumination of the lens in the right eye (Figure 5) demonstrates the embedded stone fragments and an irido-capsular adhesion. A tear to the iris sphincter is also visible inferiorly. In the left eye (Figure 6), the cornea is retro-illuminated, revealing that many of the fragments are semi-transparent. The pupil margin, delineated by the retro-illumination, shows evidence that the iris has also suffered multiple tears.

Sclerotic scatter (Figure 7) illuminates the cornea internally and shows that the cornea has suffered trauma from several hundred stone fragments.

The images were captured using a Haag-Streit BX slit lamp fitted with a Canon EOS 20D camera.

Steve Thomson is an employee of Haag-Streit AG.

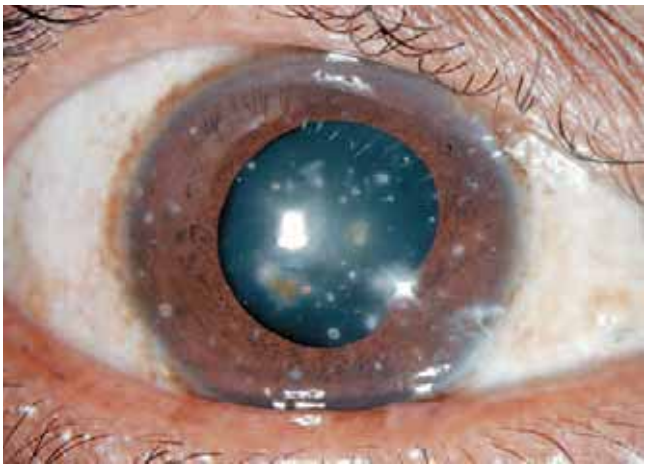

Figure 1

Figure 2

Figure 3

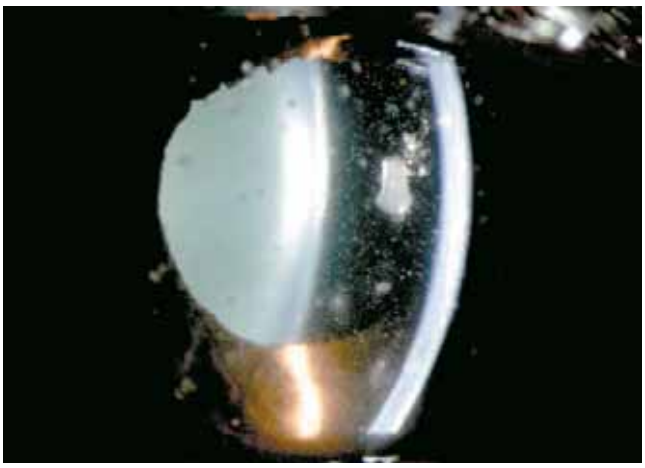

Figure 4

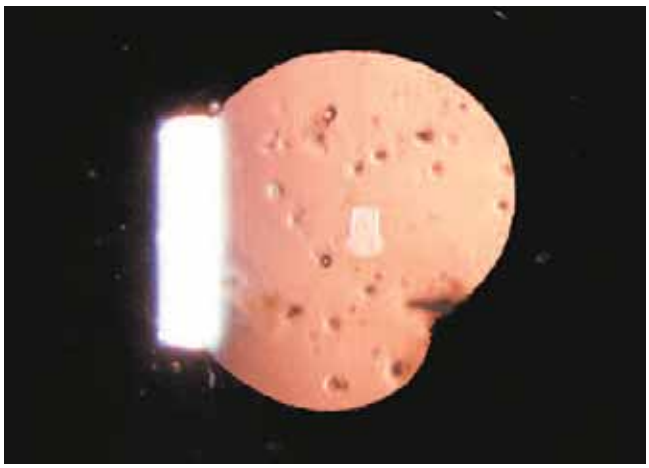

Figure 5

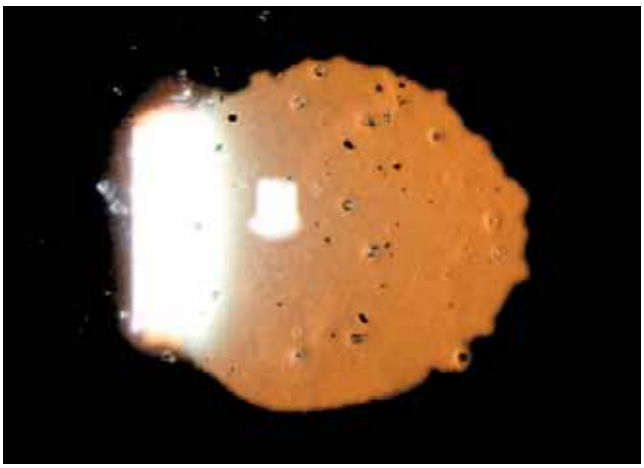

Figure 6

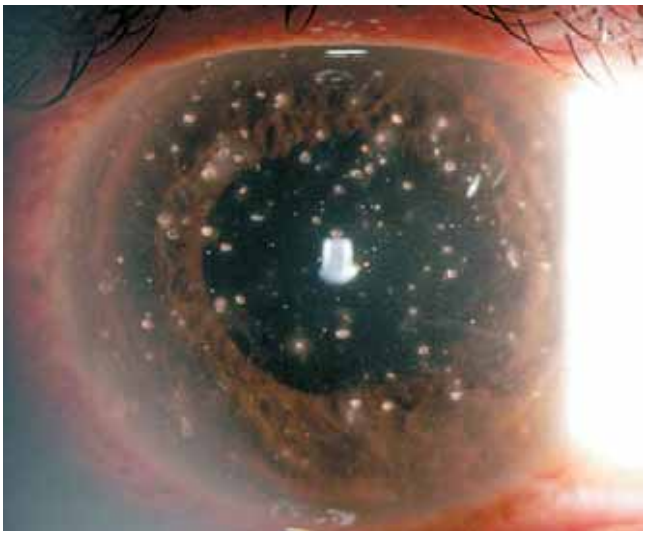

Figure 7