







Plate 1 and 2. **Extracapsular Extraction**. These pictures are taken through an operating microscope during the operation. In Plate 1 some pieces of cortical lens matter can be clearly seen against the red glow of light reflected from the back of the eye (the red reflex). In plate 2 the illumination has been changed so that it is no longer coaxial. Now the details of the lens cortex and capsule are no longer visible. Trying to perform extracapsular extraction without coaxial illumination often results in complications.





Plate 3

Plate 4

Plate 3 and 4. **Siedel's Test**. This eye has a leaking wound at the limbus of the cornea at the 2 o'clock position. The iris is drawn up towards the leak and there is a small hyphaema. As soon as fluorescein dye is placed in the conjunctival sac (Plate 4) the fluorescein stains the leaking aqueous as it trickles down the surface of the eye. The effect is enhanced in blue light. The fluorescein dye usually appears yellow when dissolved in the tears. However, when aqueous is leaking into the tears it appears slightly green because the Ph of the aqueous is more alkaline.



Plate 5. **Iris Prolapse**. This patient had a cataract extraction with a broad iridectomy. However, the iris has prolapsed through the wound at 11 o'clock.

Plate 5



Plate 6

Plate 6. **Striate Keratopathy**. Note the white opaque appearance of the cornea with a rather striped pattern deep in the corneal stroma. Only a part of the cornea is affected and so, hopefully, this cornea will clear in time.





Plate 7. **Corneal Oedema or Bullous Keratopathy**. The end result of extensive damage to the corneal endothelial cells. The cornea is permanently oedematous. In this patient the pupil is also updrawn.



Plate 8

Plate 8. **A Total Hyphaema**. No details of the iris or pupils can be seen. If the intraocular pressure is raised as well, the hyphaema should be evacuated.





Plate 9

Plate 10

Plates 9 and 10. **Post-operative Endophthalmitis**. Note the inflamed eye, the hazy cornea, the pus around the incision and the pus at the bottom of the anterior chamber (Hypopyon). In plate 9 the anterior chamber is still fairly clear, but in plate 10 it has become full of pus cells. Prompt and intensive treatment is essential to save these eyes.



Plate 11. **Retained Cortical Lens Matter**. This is seen as white fluffy material in the pupil. This eye also has striate keratopathy which are the faint white lines at the top of the cornea and a very small hyphaema, the faint red line across the pupil.

Plate 11



Plate 12



Plate 13



Plate 14



Plate 15

Plates 12, 13, 14 and 15. **Thickening of the Posterior Lens capsule**. Plate 12 shows a thickened lens capsule with a dense white plaque in the middle. Plate 13, a slightly thickened capsule with a hole in the centre following capsulotomy. Plates 14 and 15. These are two views of the same eye which has had an extracapsular cataract extraction with an intraocular lens implant. The pupil area appears normal in Plate 14, but on examining the red reflex (Plate 15) the thickened posterior capsule can be seen and so can the edge of the intraocular lens, which has become slightly decentered.



Plate 16

Plate 16. An Updrawn Pupil and Corneal Scarring. This is the end result of a rather poor cataract extraction, but the eye can still see.





Plate 17

Plate 17. An Infected Drainage Bleb After Glaucoma Surgery. This requires urgent treatment.



Plate 18

Plate 19

Plates 18 and 19. A flat anterior chamber following glaucoma surgery. The absent or flat anterior chamber can only be seen with the focal illumination of Plate 19. The iris is resting against the back of the cornea and the lens is almost touching the cornea. This eye should not be left for long without surgical treatment to reform the anterior chamber.









Plate 20 and 21. A Shallow anterior chamber following glaucoma surgery. The glaucoma drainage bleb can be seen at the top of the eye in Plate 20. The shallow anterior chamber can only be seen with the focal illumination of Plate 21. There is a small gap between the iris and the lens and the back of the cornea (compare with Plate 19). This shows that the anterior chamber is present but shallow and so the eye can be left without surgical treatment.