

Cataract and Cure

“Paradise Regained”

What is cataract?

A cataract results from clouding of the normal lens of the eye. In a normal eye, light passes through the lens to be focused on the retina. The retina is the eye's light-sensitive layer that sends signals to the brain that are interpreted as vision. To produce a sharp image, the lens must remain clear.

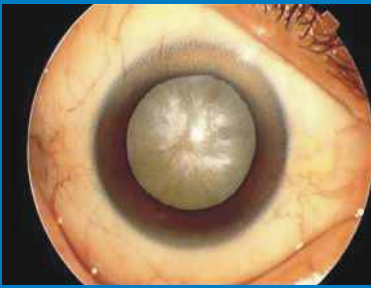


Fig. (2.a) With Cataract

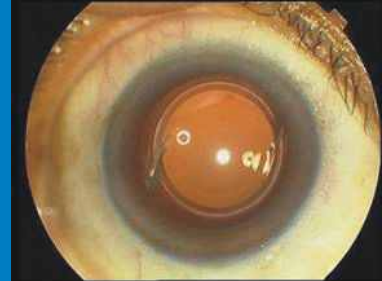


Fig. (2.b) After surgery with IOL

The lens is made mostly of water and protein. Protein arranges itself to allow light rays to pass through and to focus the rays onto the retina. Sometimes, protein clumps together, clouding small areas of the lens and blocking some light from reaching the retina. This clouding is called a cataract.

The rate of cataract progression can be unpredictable. Some cataracts worsen significantly within few weeks, others remain unchanged for many years.

The process of ageing continues throughout life and as a result the lens in our eye is also ageing. The changes develop in both eyes, one eye may be earlier than the other.

What are the causes?

Age related: Most cataracts are related to ageing.

Childhood: Some cataracts develop at birth or in childhood, often in both eyes. These may or may not affect vision.

Hereditary: A family may have a history of developing cataracts.

During development: A mother may transmit certain diseases leading to cataract to her baby during pregnancy if the mother has an infection, such as rubella (German measles).

Secondary cataract: Cataract may be linked to certain other health problems, such as diabetes or steroid use.

Traumatic: Cataract may follow an injury to the eye, either immediately or years later.

Other causes: Cataract may follow radiation exposure and excessive exposure to UV light (sunlight), smoke, or alcohol.

Symptoms

Early cataract may not cause any noticeable change in your vision. The condition tends to develop slowly, so vision worsens gradually. Some people with a cataract find that their near vision suddenly improves. This improvement is temporary. Vision is likely to worsen again as the cataract develops.

- Cloudy or blurry vision
- Problems with light, including headlights that seem too bright, glare from lamps or bright sunlight, or a halo around lights
- Difficulty in reading
- Faded colors
- Poor night vision
- Double or multiple vision (often goes away as a cataract grows)
- Frequent changes in prescription for eyeglasses or contact lenses

When to seek medical advise

When difficulty is noticed in daily routine work, the doctor should be consulted.

Treatment

The only option is surgery

A cataract should be removed when vision loss interferes with your everyday activities, such as driving, reading, or watching TV.

Surgery consists of removing the cataract and replacing it with an artificial Lens. Different types of surgeries can be done. Your ophthalmologist will discuss these surgical options with you and decide which type of lens replacement is best.

Phacoemulsification & Intraocular Lens Implantation (IOL): Today, most ophthalmologists use this technique. Also called small-incision cataract surgery, “phaco” is a walk in and a walk out surgical procedure.



Fig. (2.c) Phacoemulsification



Fig. (2.d) Multifocal IOL

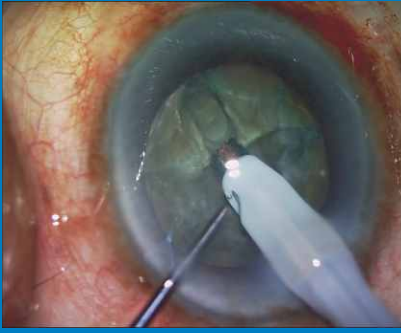


Fig. (2.e) Cataract extraction by Phacoemulsification

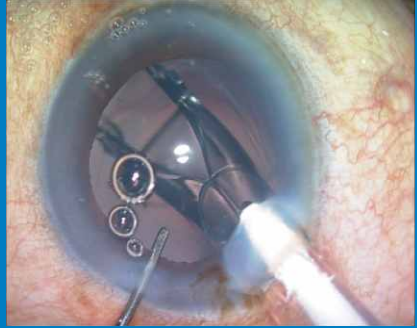


Fig. (2.f) Intraocular lens implantation

Fig. (2.g) Bausch & Lomb Millennium, Microsurgical system

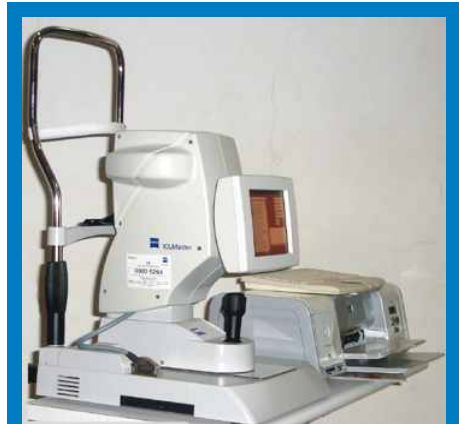


Fig. (2.h) Zeiss IOL Master

Apart from the mature cataracts, even immature cataracts need to be removed if it hampers with the patient's visual requirements. There is no necessity to wait for the cataract to ripen as in earlier times.

Will I need glasses after surgery?

Very often not, you may need to wear glasses only to fine-tune your vision or only for reading and near work. These are normal glasses and not "thick" spectacles.

Multifocal IOL's are new modalities which treat both distance and Near Vision enabling patients to lead a life free of glasses.

Caveats :

- Surgery is the only treatment for cataract.
- Phacoemulsification + foldable IOL has become almost an out patient procedure.
- Incision size is as small as 1.5mm.
- Different types of IOL's like Multifocal IOL's, Blueblocker IOL's, Aberration-free IOL's can be considered.