

# Cataracts

**Although cataracts do not cause irritation or pain, it is the most common cause of blindness in the world. Fortunately, it is treatable with safe, effective surgery.**

## What are cataracts?

A cataract is a condition in which the lens of your eye turns cloudy, preventing sufficient light from entering your eye, therefore reducing vision. Eventually, this deterioration in vision will interfere with your daily activities, such as reading or driving a car (particularly at night).

Most cataracts develop slowly and you may not notice it in the earlier stages of the condition. However, your vision will be affected as the clouding progresses.

## Are cataracts dangerous?

Cataracts are not dangerous to eye health unless they become completely white. This condition, called an overripe or hypermature cataract, can cause raised eye pressure and present suddenly with redness and pain in the eye, as well as headaches. If a cataract causes inflammation and raised eye pressure, it will need to be removed.

## Causes

Cataract formation is associated with ageing and is common in the elderly. In young people, it can be congenital, associated with inflammatory eye disease or due to injuries.

Other risk factors include prolonged UV light exposure, long-term use of certain medications and medical conditions such as diabetes.

## Symptoms

The first sign that you may have a cataract is if you have blurred vision that cannot be corrected with the usual corrective visual aids such as glasses. You will experience the need for frequent change of glasses, colours appearing dull, poor vision in bright light, halos around lights, difficulty in reading, watching television or driving at night.

Signs and symptoms of cataracts include :

- Clouded, blurred or dim vision
- Difficulty seeing at night that worsens with time
- Sensitivity to light and glare
- Seeing halos around lights
- The need for bright light when reading and performing other tasks
- Fading or yellowing of colours
- Double vision in one eye

## Risk Factors

Everyone is at risk because age is the greatest risk factor. Your risk of developing cataracts increases with :

- Age
- Diabetes
- Prior eye injury or inflammation
- Prior eye surgery
- Prolonged use of corticosteroid drugs
- Excessive exposure to UV light
- Smoking

## Prevention

There is no scientifically proven prevention. However, these tips will help prevent cataracts :

- **Protect your eyes.** Protect your eyes from UV light by wearing sunglasses regularly.
- **Regular eye examination.** Regular eye examination is the key to early detection. Have your eyes checked by an eye care professional if you experience any eye problems.
- **If you are over 65, you should have your eyes examined by an eye care professional regularly.**
- **Maintain a healthy lifestyle.** You can also reduce your risk of developing cataracts by maintaining a healthy lifestyle – do not smoke and eat a balanced diet.

## Treatment

Cataracts cannot be cured with medications.

**Lifestyle adjustments** such as changing your spectacle power, using a magnifying glass to read or



Clear vision – without cataract.



Blur vision – with cataract.

improving the lighting in your home can be adopted in the earlier stages of the condition.

**Cataract surgery** is required when the condition starts to interfere with your daily activities. It is a painless, safe and effective surgery. During the procedure, the clouded lens is removed and replaced with a clear lens implant.

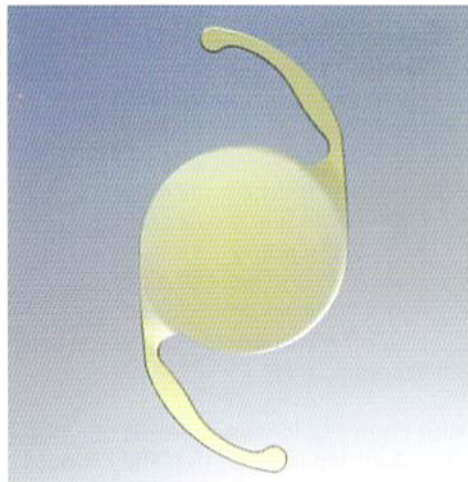
The cataracts are rarely removed without the need to implant new lenses. In these cases, vision can be corrected with aids such as glasses or contact lenses.

Cataract surgery is performed as a day surgery without general anaesthesia but with topical anaesthesia.

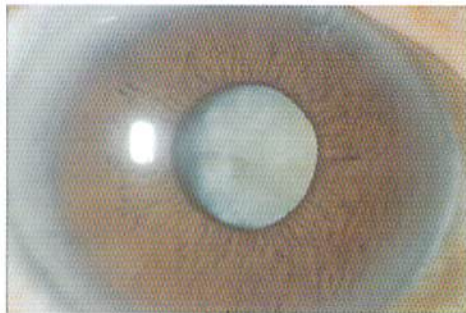


### Safer healing in cataract surgery

Most cataract surgeries are performed using a technique called phacoemulsification which does away with the need for stitches. The procedure involves making a small incision of 1.8 to 3mm on the cornea. A vibrating instrument is then introduced into the eye through this incision. This process causes emulsification (i.e. softening) of the clouded lens, which is sucked out through the instrument. The capsule of the lens is left behind to receive the lens implant.



An IOL implant.



Eye with cataract.

### Types of Intra-ocular Lenses

There are various types of intra-ocular lenses (IOL) available. Discuss with your doctor about the most suitable type of lenses for you.

#### 1. Monofocal

- Provides good vision at a specific distance
- Reading glasses will most likely be required for reading

#### 2. Advanced Monofocal

- Aspheric lenses – Provides sharper, better quality vision especially in poor lighting conditions e.g. driving at night when it is raining
- Toric lenses – Treats astigmatism, reducing the need for spectacles for distance vision

#### Monofocal lenses in both eyes

The full distance correction in both eyes will benefit those with an active sports/outdoor lifestyle.

#### Monovision using monofocal lenses

The IOL power is chosen to provide :

- Good distance vision in one eye, and
- Good near vision in the other

This will allow most patients to be spectacle-independent for most activities. They may still need reading glasses when reading for prolonged periods of time. Not all patients are able to tolerate monovision lenses and depth of vision may be reduced.

### 3. Multifocal

- Provides good distance and near vision without glasses

Suitable for those who :

- Want reduced spectacle dependence
- Have minimal astigmatism
- Engage in activities with a significant amount of intermediate distance work
- Drive mostly in the daytime

For best results, these lenses should be used in both eyes.

*Multifocal lenses offer :*

- Greater convenience
- Near and intermediate vision is clear at a fixed distance from the eye (e.g. computer, housework)

*After surgery, some people may notice :*

- Difficulty reading small print in dim light
- Colours may appear less brilliant
- Halo vision at night (i.e. ring of light around street lamps or car headlights)

*These symptoms are temporary in most cases and are less likely if both eyes have these lenses.*

### Multifocal Toric IOLs

These are also available today. These IOLs provide for near/intermediate and distance vision just as other multifocal IOLs with their attendant side effects, but in addition incorporate the astigmatism correction.

### 4. Accommodative

- Provides good distance and intermediate vision without glasses
- Near vision is limited and reading glasses are required for serious reading
- Depends on the eye's focusing muscle to move the lens to focus

Suitable for those who :

- Want reduced spectacle dependence
- Have minimal astigmatism
- Major activities include significant intermediate distance work
- Drive in both day and night time

For best results, this lens should be used in both eyes.

*Accommodative lenses offer :*

- Great convenience
- Good distance, intermediate and near vision

*After surgery, some people may:*

- Require reading glasses for extended reading
- Have halo and glare at night
- Require a laser procedure one year after surgery to clear vision in some cases

Your choice of lenses depends on your lifestyle. Keep in mind that they should improve and enhance your overall vision.