PROCEDURE

Cataract removal

Cataract removal replaces the eye's cloudy natural lens with a clear artificial lens.

PURPOSE
Replace a cloudy natural lens to improve vision

PROCEDURE TYPE
Therapeutic, minimally invasive eye surgery

WHERE IT IS DONE
Outpatient operating theatre or eye surgery centre

ANAESTHESIA
Local, often with light sedation; general in selected cases

HOW LONG IT TAKES
Usually 15 to 45 minutes per eye

PREPARATION
Eye measurements; medicines and fasting reviewed beforehand

RECOVERY
Same day; no driving until cleared and vision is safe

MAIN RISKS
Infection, swelling, retinal detachment, or permanent vision loss

RESULTS
Vision often improves within days, then settles over weeks

Overview

Cataract removal is surgery to remove the cloudy natural lens inside your eye and replace it with a clear artificial lens called an intraocular lens, or IOL.

Most cataracts are removed using phacoemulsification. Through a small opening, the surgeon uses ultrasound to break up the cloudy lens, removes the pieces and inserts the folded replacement lens.

The operation is usually performed on one eye at a time, and you normally go home the same day. It can improve blurred vision, glare, faded colours and difficulty seeing in low light. The benefit also depends on the health of your retina, optic nerve and other parts of the eye.

Why the procedure is performed

Surgery may be offered when a cataract interferes with activities such as reading, working, driving, recognising faces or moving around safely.

A cataract does not need to be removed just because it is present. The decision is usually based on how vision affects your daily life.

Removal may also be recommended if the cataract prevents examination or treatment of another eye condition. Occasionally, surgery helps manage lens-related eye pressure or other problems.

Who should and should not have it

You may benefit if a cataract affects daily activities and glasses no longer provide enough improvement. Your eye specialist should discuss your goals and whether another eye condition may limit the result.

Surgery may not be appropriate if the cataract has little effect on your life or the likely improvement is small. You can usually wait and reconsider later.

The operation may be delayed if you have an active eye infection, significant inflammation, an eyelid or eye-surface problem, or a temporary medical condition that makes surgery or anaesthesia less safe.

Advanced glaucoma, macular degeneration, diabetic eye disease or previous eye injury do not always prevent surgery. However, they may limit improvement or make the operation more complex. Your surgeon should explain this before you consent.

How to prepare

Follow your treating facility's instructions because preparation depends on the anaesthetic, your medicines and your general health.

The team measures the shape and length of your eye to calculate the replacement lens power. You will discuss whether to aim for clearer distance vision, near vision or a planned balance between the two.

Tell the team about all medicines and supplements you take, especially medicines that reduce blood clotting. Do not stop a blood thinner like warfarin or apixaban unless the team responsible for your procedure tells you to.

Use any prescribed eye drops as directed. Follow instructions about eating and drinking;

fasting may be required for sedation or general anaesthesia.

Arrange for someone to take you home. Do not wear eye makeup, and avoid contact lenses if instructed. Bring your medication list and requested eye drops.

What happens during the procedure

Staff confirm your identity, the eye being treated and the planned replacement lens. Drops widen the pupil, and the eye is numbed with drops, sometimes with an injection around the eye.

You are usually awake. You may receive a sedative to relax, while general anaesthesia is used only in selected situations.

A sterile drape covers your face, with an opening over the eye, and a small device holds the eyelids open. You may notice lights, colours, movement or water but should not see the operation in detail.

The surgeon makes a small opening near the edge of the eye, breaks up and removes the cloudy lens, and places the new lens inside the capsule that held your natural lens. The opening usually seals without stitches, although a stitch is sometimes needed. A shield or dressing may be applied.

Recovery and what to expect afterward

Mild aching, watering, itching or a gritty feeling is common at first. Vision may be blurred, and lights may appear bright. Use prescribed drops as directed and do not rub or press the eye. Severe or worsening pain is not expected.

You can usually eat and drink normally after local anaesthesia. After sedation or general anaesthesia, follow the recovery team's instructions.

Gentle activity is usually possible soon afterward. You may need to avoid swimming, eye makeup, dusty environments, heavy lifting and strenuous exercise while the eye heals. Wear the eye shield at night if instructed.

Do not drive home. Drive again only when your vision meets legal requirements, you can react safely and your healthcare team agrees. Sedation may create an additional restriction.

Desk-based work may be possible within several days. Jobs involving dust, water, heavy lifting or physical risk may require more time away.

Risks and possible complications

Most people recover without a serious problem, but possible complications include:

Months or years later, the capsule behind the artificial lens may become cloudy. This posterior capsule opacification is not a new cataract and can often be treated with a brief laser procedure.

Another procedure may be needed if a complication occurs or the replacement lens is not suitably positioned.

- Infection inside the eye
- Bleeding, inflammation or increased eye pressure
- Swelling of the cornea or central retina
- Damage to the lens capsule
- Movement or incorrect positioning of the replacement lens
- A retinal tear or retinal detachment
- Glare, halos or an unexpected glasses prescription
- Reduced vision or, uncommonly, permanent severe vision loss

Results and follow up

Vision often improves within a few days, although early blur is common and the eye may take several weeks to settle. Colours may look brighter.

Cataract removal cannot restore vision already lost through damage to the retina, optic nerve or other structures.

Attend follow-up appointments so the team can check healing, eye pressure, vision and lens position. Continue your drops for the prescribed period, even if the eye feels comfortable.

Your glasses prescription may change. A final prescription is usually considered once healing and vision have stabilised. If both eyes need surgery, the second operation is generally planned separately.

Alternatives

Surgery is the only way to remove a cataract, but it may not be needed immediately. Waiting avoids surgical risks for now, although vision may remain limited or worsen.

Updated glasses, brighter lighting, magnifiers and anti-glare measures may help mild symptoms but cannot clear the cloudy lens.

Standard phacoemulsification uses ultrasound. Laser-assisted surgery uses a laser for some steps but still requires lens removal and insertion of an IOL; it may cost more and has not replaced standard surgery.

A single-focus replacement lens usually provides clearer vision at one planned distance, with glasses needed for others. Lenses intended to reduce dependence on glasses may provide a wider range of focus but can cause more glare, halos or reduced contrast.

When to call your healthcare team

Contact your eye surgery team promptly if pain, redness, swelling or blurred vision is worsening rather than improving. Also call about persistent discharge, new double vision, troublesome nausea or concerns about your eye drops.

Seek urgent assessment the same day for:

If you cannot reach the surgery team, use an urgent eye service or emergency department. Routine questions about drops, glasses, work or scheduled follow-up can usually wait for clinic hours.

- Sudden loss or marked worsening of vision
- Severe eye pain
- Rapidly increasing redness
- New flashes, many new floaters or a curtain-like shadow
- An eye injury after surgery

Common questions

Will I be asleep?

Usually not. Your eye is numbed, and you remain awake. You may receive medicine to relax. General anaesthesia is used in selected situations.

Can I drive home?

No. Arrange transport home. Do not drive again until your vision is safe, any sedation restriction has passed and your healthcare team has cleared you.

How painful is cataract removal?

The procedure should not be painful, although you may feel pressure, water or movement. Mild soreness or grittiness afterward is common. Severe or worsening pain needs prompt assessment.

When will I know if it worked?

Improvement may be noticeable within days, but early blur is normal. The final result becomes clearer over several weeks and after any updated glasses prescription.

Will I need stitches?

Usually not, because the small opening often seals itself. A stitch may be used to secure the wound.

Can a cataract come back?

The removed cataract cannot return. The capsule behind the artificial lens may later become cloudy, but this can often be cleared with laser treatment.

Sources

- National Institute for Health and Care Excellence. Cataracts in adults: management (NG77)
- Royal College of Ophthalmologists. Cataract Surgery Guidelines
- National Eye Institute. Cataracts
- NHS. Cataract surgery
- American Academy of Ophthalmology. Cataract Surgery