

Patient information

INTACS Surgery for Keratoconus

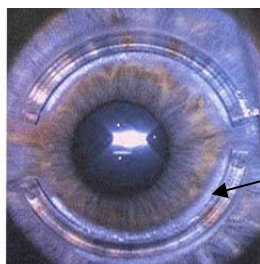
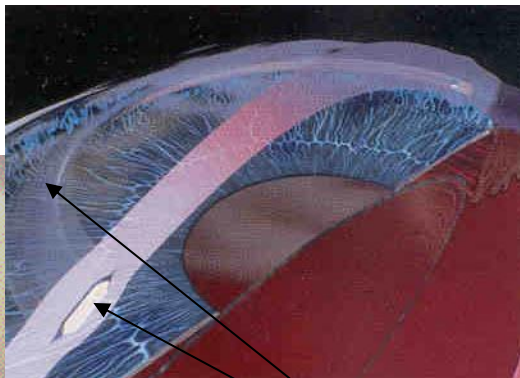
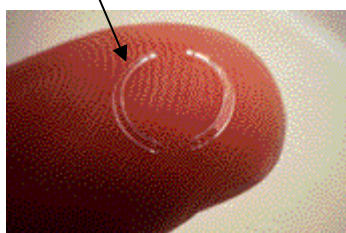
St Paul's Eye Department - Royal Liverpool Hospital

This should be read in conjunction with the Patient Information Leaflet "Keratoconus" (PIF 606) which explains keratoconus.

What is INTACS surgery for keratoconus?

INTACS are plastic segments which are placed within the cornea in order to change the shape of the cornea, reducing the conical shape caused by the keratoconus process.

Segment of INTACS



Segment of INTACS within the cornea

INTACS were originally designed to treat short sightedness in people wishing to get rid of glasses or contact lenses. More recently, doctors working in America and in Europe have found INTACS to have a useful role in keratoconus as well.

Insertion of INTACS

The operation is performed under local anaesthetic (so that you stay awake) using drops and sometimes an injection. General anaesthesia can be an option as well.

Your eyelids are held open by a clip (speculum) so that you cannot blink.

A suction device is placed on your eye so that a specially designed knife can create a channel within your cornea, like tunnelling underground. The INTACS is then inserted into the channel, like feeding a telephone cable along the underground tunnel. A stitch is used to seal over the entrance to the tunnel.

Who can have INTACS?

People with early to moderate keratoconus are suitable, especially if contact lenses are used but are becoming a problem to wear. They may be used in people who might otherwise need a corneal transplant.

Is this experimental?

The surgeons, Professor Kaye and Mr Batterbury have been trained to insert INTACS and follow the guidelines suggested by other surgeons. The development of the surgery is still in the experimental stage and the long-term effects are not known.

However it is not expected that there will be any long-term problem, the INTACS segments can be removed and having INTACS does not prevent future corneal transplant surgery.

What are the benefits of this procedure?

Improvement in your unaided sight with easier and better fitting of glasses or contact lenses and avoidance of corneal transplant surgery are all potential benefits.

What are the risks of having INTACS?

The main difficulty with such new techniques is knowing whether it will help an individual person. Therefore failure to achieve the desired effect is the biggest problem.

Sight-threatening severe complications such as infection, thinning of the cornea overlying the INTACS and inflammation can occur but are very rare. Glare, haloes and foreign body sensation can also occur. It is estimated that any complication will occur in less than 5% of eyes.

Are there any alternative treatments available?

The options are to persist with contact lenses or to try another type of operation, namely a corneal transplant.

What will happen if I decide not to have treatment?

You can instead continue as you currently are or consider having a corneal transplant operation, which you should discuss with one of the corneal team members.

What sort of anaesthetic will be given to me?

You will be given a local anaesthetic. Local anaesthetic is drug induced numbness: it may be provided by an anaesthetist, surgeon or other healthcare professional, depending on the technique used. Like all medicines, local anaesthetics may sometimes cause side effects, as well as the effects that are needed.

You may experience dizziness, blurred vision, drowsiness and occasionally loss of consciousness.

Serious side effects are rare, and include fits, low blood pressure, slowed breathing and changes in heartbeat, which may be life-threatening. If you have any concerns about any of these effects, you should discuss them with your doctor

The risks of anaesthetic and surgery are lower for those who are undergoing minor surgery, and who are young, fit, active and well.

For more information, please ask for a copy of the Royal College of Anaesthetists Patient Information “You and Your Anaesthetic”.

You will be given an opportunity to discuss anaesthetic options and risks before your surgery.

If you are worried about any of these risks, please speak to your Consultant or a member of their team.

Getting ready for your operation

You may need to be seen in the pre-operative clinic before you are admitted to hospital. Here you will have blood tests, and sometimes a heart trace or a chest X-ray. You will be assessed to see if you are fit for the anaesthetic.

- The staff will ask routine questions about your health, the medicine you take at the moment and any allergies you may have.
- You will be given instructions on eating and drinking before your operation.
- You will be able to discuss the operation with a doctor. You will be asked to sign a consent form to say that you understand the procedure, and what the operation involves.
- Please leave all cash and valuables at home. If you need to bring valuables into hospital, these can be sent to General Office for safekeeping. General Office is open between 8.30 and 4.30 Monday to Friday. Therefore, if you are discharged outside these times, we will not be able to return your property until General Office is open. The Trust does not accept responsibility for items not handed in for safekeeping.

On the day of your operation, you may be asked to have a repeat eye test or corneal topography examination.

What should I expect after my operation?

You will return to the day ward and as soon as you feel able you will be able to go home. You will be asked to use some eye drops and should have a follow-up appointment for an outpatient clinic before you leave.

Discharge Information

Pain relief and medication

The nursing staff will advise you about painkillers before you leave the hospital. Please tell the nurses what painkilling tablets you have at home. Simple painkillers like paracetamol will usually be sufficient.

Getting back to normal

Remember that you have just had an operation. It is normal to feel more tired than usual for a few days afterwards. Having had an eye operation you should be careful about rubbing your eye. Ask the doctor about resuming exercise; there won't usually be a restriction, other than for swimming which you shouldn't do until after your first post-operative outpatient visit.

Driving

You can drive as soon as your eyesight allows.

Returning to work

Return to work as soon as you like. Ask the doctor if you are in doubt about the type of work you do.

Further Appointments

You will need a short course of drops and will be seen again in the outpatient clinic after a week or two. You will need sight testing by the St. Paul's optometrists.

It is likely that you will still need some kind of spectacle or contact lens to achieve your best sight, though it is also hoped that your unaided sight (without glasses or contact lenses) will be improved.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated

Further information

Ophthalmic Secretary

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