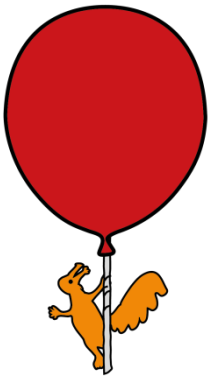


Alder Hey Children's NHS Foundation Trust

Department of Ophthalmology

Secondary Intraocular Lens Implantation

Information for parents and carers

Introduction

This leaflet aims to support the discussion you have had with your child's Ophthalmologist, and to enable you to make an informed decision.

What is a secondary intraocular lens?

Usually, children are born with a natural lens in their eye. This lens bends light into focus onto the special light sensing area at the back of the eye called the retina.

In certain conditions, such as clouding of the lens (known as a cataract) or if the lens position shifts, the natural lens needs to be removed to allow the child to see. Your child would need a replacement for the function of this lens which may be in the form of spectacles/glasses, contact lenses and/or an artificial lens. This artificial lens insertion is known as intraocular lens (IOL) implantation.

Your doctor will have discussed with yourself and child whether the option of an artifical lens was suitable at the time of the original lens removal surgery or whether it will become an option at a later date. If the artificial lens is inserted in a separate operation after lens removal, this is known as SECONDARY IOL implantation.

Can my child have a secondary intraocular lens?

There are certain criteria that needs to be met if a child can have an IOL inserted. Structurally the eye has to be large enough and there has to be adequate support for the lens. The child needs to be old enough for the lens to be implanted. This usually means being above the age of 2 years.

There are some conditions, such as glaucoma and intraocular inflammation, in which implantation of the lens may be associated with a higher risk of complications.

Your doctor will discuss with you if there are an contra-indications to IOL implantation for your child.

What does secondary intraocular lens implantation involve?

This procedure requires surgery and is performed under general anaesthetic. It is usually performed as a daycase. Prior to surgery, some measurements will need to be taken to calculate the strength of the IOL that will be implanted.

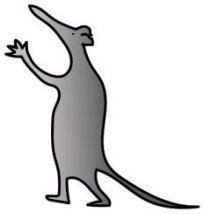
An IOL is usually inserted in the capsule bag of the lens; which is a very thin membrane (less than one tenth of a millimetre). Here the IOL is in a similar place to the natural lens. However this is not always possible. In such circumstances the IOL is placed in front of the capsule, behind the iris (the coloured part of the eye). Small stitches are used to close the wounds and they are generally dissolvable.

Rarely the capsule bag cannot provide enough support for the new lens. There are alternative procedures available including fixing the lens to the sclera or iris. Your doctor will discuss with you if your child requires an alternative procedure.

What are the benefits of my child having a secondary intraocular lens implant?

Your child has had to wear glasses and/or contact lenses following their lens removal surgery. High prescription glasses are required which can be thick and heavy. In addition, images tend to be distorted at the edges of these glasses. Contact lenses require careful handling, can be tricky to insert and remove, and does not suit everyone. A secondary lens implant can help overcome some of these difficulties. The prescription of any subsequent glasses is reduced and so are less bulky. This will reduce the weight and reduce the distortion at the edges of the glasses.

It is likely that your child may still require glasses after surgery for the distance. They will, however, always require glasses for reading/close vision. This is because to read, a natural lens will bend and become more powerful to focus on things that are closer. IOLs do not have the ability to do this. Therefore glasses may be made in 2 parts (bifocal) where the top part of lens helps focus for the distance and there is a different lens at the bottom for near work. Your child may already have been wearing bifocal glasses.



What are the risks of my child having a secondary intraocular lens implant?

Common side effects

Blurred vision: Initially the vision can be quite blurred as the eye settles from the surgery. This usually settles down within the first month as the eye heals and the stitches dissolve.

Discomfort/Sensitivity to light: Often the eye can feel uncomfortable for the first few days and can be sensitive to light. Eye drops that are given after the surgery will help with this.

Inflammation: This may be associated with a red eye and some pain. Steroid eye drops are given after surgery to reduce the risk of this. It is essential that these eyedrops are given as prescribed.

Uncommon side effects

Infection

With any operation happening within the eye there is always a risk of infection within the eye. Infections within the eye can be difficult to treat and can lead to a reduction in vision. There is even a possibility of losing the eye. The chance of this is exceptionally rare. To reduce the risk we always meticulously clean the eye, operate under sterile theatre conditions and give antibiotics in the eye during the procedure and antibiotic drops following operations. **If your child was to develop severe pain, reduced vision, increased redness, or inability to open the eye then call the eye clinic straight away.**

Refractive outcomes

As mentioned earlier, doctors have to choose the power of this lens very carefully. The power of the lens will determine the glasses prescription which may eventually be needed. We will carry out measurements of the eye and take into account how much your child's eye is projected to grow. We apply this to special formula's to predict the power of the lens. The formula that currently exist are designed for adults and none are specifically designed for children. We would expect children to still need some glasses correction following this procedure. There are however, on very rare occasions, where the intraocular lens would still leave a child with an unexpectedly high

prescription. We would attempt to correct this with spectacles but if this is not possible we would have to exchange the lens in another procedure.

Are there any alternatives to this procedure?

As mentioned above glasses and contact lenses to a certain extent can mimic the function of an intraocular lens. Your child has likely already used one or both methods.

What will happen if I decide that my child will not have a secondary lens implant?

We will continue to provide the best care for your child and ensure appropriate contact lens and/or spectacle correction is given.

How long will this procedure take?

We would normally expect the procedure to take roughly one hour plus anaesthetic time. Occasionally extra procedures may need to be performed to allow the lens to be inserted. Your consultant will discuss with you if this needs to be done.

How long will my child be in hospital?

This procedure will usually just be a day case operation meaning you will come in and leave hospital on the same day. Occasionally there may be reasons why your child would need to stay in hospital after the surgery. Your doctor will discuss the reasons if this would be required.

Caring for your child's wound

The wound is usually very small and dissolvable stitches are usually used. These will usually dissolve over the next two months. Your doctors will prescribe eyedrops that will need to be used. In addition a shield will be provided that will need to be worn overnight for one week to minimise risk of accidentally rubbing the eye.

For the first week after surgery we would recommend keeping the wound as clean as possible. This would mean avoiding any messy or mucky play. I would avoid washing the face in the shower, and use a wet cloth to clean.

If there is any discharge/mucus from the eye, we would suggest bathing a cotton pad in cooled boiled water and wiping around the eye but avoid anything going into the eye itself.

Returning to school

We would expect your child to return to school after the eye is comfortable and vision is suitable for school. This would usually be after 1 week.

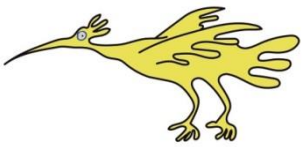
However we would like your child to avoid any P.E., contact sports or heavy lifting for the first month to allow time for the eye to settle.

Further appointment information

We will usually see your child the first day after surgery and then one week following the operation. We will have our optometrists check for glasses prescription shortly after this. We will then periodically ensure the eye is healing well and update glasses prescriptions as necessary.

For further information

Hospital telephone number: 0151 228 4811
Extension for clinic: 2215
Extension for secretary: 2839 / 3595 / 2961



This leaflet only gives general information. You must always discuss the individual treatment of your child with the appropriate member of staff. Do not rely on this leaflet alone for information about your child's treatment.

This information can be made available in other languages and formats if requested.

Please have a look at our virtual map https://virtualtour.visual-eyes.co.uk/tour/alder-hey-childrens-hospital prior to your visit. Here you will find - 360° walk-through of over 188,000 square feet of Alder Hey captured in 4K.
- interactive 'hotspots'.
- videos explaining what happens when you have a procedure or arrive for an appointment.
- Virtual signage to help you find your way around.

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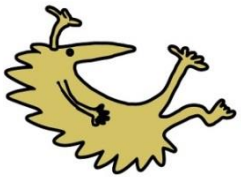

 Review Date: March 2029 **PIAG: 619**