Paediatric information

Cataract surgery: information for parents

This leaflet aims to answer some of the questions you might have about your child’s cataract surgery. This leaflet doesn’t cover everything as every child and cataract is different. Your surgeon will discuss your child’s particular case with you. Please ask the clinical staff about anything you want more information about.

Your child has a natural lens inside the eye that helps her to see. The lens should be transparent like glass but a cataract makes the lens cloudy.

Mild cataract

Artificial lens (IOL)

Severe cataract
What causes cataract in children?
There are many different causes of cataract in children. The most common causes are:

- Infections while the baby is still in the womb, like chicken pox or rubella (German measles)
- Inherited conditions. Some types of childhood cataracts run in families. Children may inherit the gene(s) for cataracts from a parent who may also have had childhood cataracts.
- Syndromes. Some conditions such as Down’s syndrome carry an increased risk of childhood cataract. Some but not all of these conditions are inherited from parents.
- Eye conditions such as uveitis (inflammation in the eye)
- Conditions that affect metabolism such as diabetes
- Trauma
- Sometimes no one can determine exactly why the cataract has occurred.

Your child may also be seen by the paediatrician who will check to see if there are any other conditions associated with the cataract.

How are cataracts treated?
Not all cataracts need an operation and sometimes glasses will improve the vision. Even if no surgery is done your child will still need to be checked in clinic to monitor how the eyes are developing.

Having cataracts is a problem that can only be completely cured by surgery. No other medical treatment is currently available.

Cataract surgery in children
In older people cataract surgery is a common and quick operation that is almost always successful. Cataract surgery in children, however, is more complicated and the results less predictable because the eyes are still growing and there is more inflammation and scarring produced in response to the operation.

Adults have cataract surgery with a local anaesthetic, where the eye goes numb but they are awake. Children have a general anaesthetic, where they are asleep for the operation. Before the operation some measurements will be taken of the eye using a scanner machine in the clinic.

During the operation, which takes between 30 to 60 minutes, the doctor will remove the lens with the cataract in it from the eye. Then they might fit an artificial lens (called an intra-ocular lens or IOL) inside the eye. IOLs are usually fitted in children who are seven months and older. Younger children or those with very complicated eye conditions may be left
without a lens (aphakic).

After surgery a pad and a clear protective shield are usually placed over the treated eye. These are kept on for the night after surgery and can be removed the next morning. The shield is usually needed overnight to protect the eye for one to two weeks.

If your child has cataracts in both eyes, each eye will require a separate operation, usually within a short time of each other. The two operations are not usually done together because that could increase the risk of infection.

Before the surgery and on the day
See: General anaesthetic factsheet. Your child will have a pre-operative assessment before surgery and you will be given information about the general anaesthetic process. Your child may need a further anaesthetic assessment before the operation goes ahead.

After the surgery
As a parent/carer, your input into your child’s care after surgery is extremely important. It can make the difference between success and failure of the operation.

Following the operation your child will need regular eye drops to prevent inflammation (redness and soreness) and infection. One of the drops used to prevent soreness also dilates (enlarges) the pupil.

Use pain relief such as paracetamol and/or ibuprofen if your child’s eye is painful. **Do not allow your child to rub the eye as this could loosen the stitches.** You may be given a plastic shield to put over your child’s eye to protect it at night and this can be used in the daytime as well, if you wish.

The doctor will need to see your child frequently after surgery – sometimes the day after surgery, then one, two and four weeks after surgery and regularly thereafter.

If no artificial lens was placed in the eye, a contact lens will be fitted about two weeks after the surgery or sometimes strong glasses are used.

If your child has an artificial lens put in, it will help her to see clearly in the distance, with or without the help of glasses. The artificial lens will not be able to change shape and focus at different distances like a natural lens. Your child will, therefore, need bifocal or varifocal glasses to help her to see clearly at different distances. The prescription of the contact lenses or glasses may change frequently.
Your child might need patching treatment to improve the eye with weaker vision.

**This is absolutely crucial and families must be committed to doing this as otherwise the vision will remain very poor after the operation.**

If no artificial lens was placed in the eye, another surgery may be done to implant one when the child is much older.

**What are the risks of the operation?**
A child's eyes are very delicate and as with all surgery there are possible side effects. Most side effects are mild and recover, such as soreness, redness and bruising. Listed below are some more serious possible complications. As long as your child is regularly checked by the ophthalmologist, it should be possible to quickly identify any problem. Very serious complications are rare but have the potential for the sight or the eye to be permanently severely damaged.

**Infection**
Infection inside the eye (called endophthalmitis) is very rare but can cause severe damage to the eye. Keeping the eye clean and using the antibiotic eye drops help to prevent it. If your child does get an infection it will be treated with antibiotics.

**Loose stitches**
Stitches may be used to close the opening in the eye through which the lens was removed. These may become loose and cause the eye to become sore and red. The stitches used are usually the type that dissolve with time and do not need to be removed.

**Different eye appearance**
Surgery can cause the shape of your child's pupil to look a bit different afterwards. It may become oval or appear off centre, but this will usually not affect her vision.

**Glaucoma**
Glaucoma is where pressure inside the eye is increased which can gradually damage the nerve of sight and cause loss of vision. It may require treatment with drops, medicine or even surgery. The risk of glaucoma after childhood cataract surgery is up to 50%. The risk is greatest if cataract surgery is done before six weeks of age.

**Amblyopia (lazy eye)**
This occurs where visual development in one or both eyes has been held back. The usual way to treat amblyopia is to wear a patch over the stronger eye to encourage the weaker eye to work. Amblyopia can develop in virtually all cases where cataract affects only one eye, whether the cataract is treated or not.
**Strabismus (squint)**

A squint or eye turn may develop and sometimes needs treatment with glasses or surgery. A squint can develop in virtually all cases where cataract affects only one eye, whether the cataract is treated or not.

**Capsule thickening**

The membrane behind the lens implant inside the eye (called the posterior capsule) can cloud over, which often happens in young people. Sometimes, to prevent this, a hole is made in the posterior capsule at the time of surgery. Alternatively, a thickened capsule may need later treatment by laser or more surgery.

**Anaesthetic risks**

Anaesthetics are usually safe, but there are small and potentially serious risks. Unpredictable reactions occur in around one in 20,000 cases and unfortunately death in around one in 100,000.

**The outcome**

Not all children with cataract need surgery. When young people do require surgery it is not easy to predict its success. Factors that affect the success of surgery include how bad the cataract is and whether any complications happen after surgery. For most who need an operation, surgery will improve the vision but there will be some children who continue to have poor vision afterwards. Children with cataracts in both eyes who need surgery achieve an average vision of 6/18 (half way down the vision chart). Children who have a cataract in only one eye and require surgery achieve on average vision of 6/60 in the affected eye (the top letter of the chart only). The common cause of poor vision after surgery for cataract in one eye is inadequate patching.

**Useful Websites**

www.childhoodcataracts.org.uk

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Patient advice and liaison service (PALS)
Phone: 020 7566 2324 or 020 7566 2325
Email: pals@moorfields.nhs.uk
Moorfields’ PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks
Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs.