



## What causes cataracts in children?

There are many different causes of cataract in children. Sometimes no one can determine exactly why the cataract has occurred. However, 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 to the eye.

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

## How are cataracts treated?

Having cataracts is a problem that can only be completely cured by surgery. No other medical treatment is currently available. However, 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 their eyes are developing.

## 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. In addition, 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 in clinic using a scanner machine.

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 (see figure 3 on next page). 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 and on the day of surgery

Your child will have a pre-operative assessment before surgery where you will be given information about the general anaesthetic process. He or she may need a further anaesthetic assessment before the operation goes ahead. For further information, see our general anaesthetic leaflet.

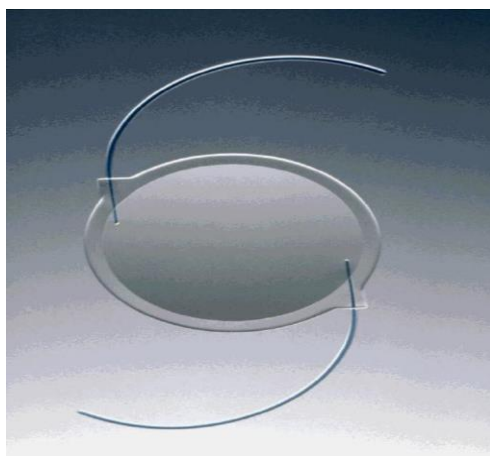


Figure 3: artificial lens (IOL)

### Surgery aftercare

As a parent/carer, your input into your child's care after surgery is extremely important. It can make the difference between the success or 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.

If your child's eye is painful, you can give them pain relief such as paracetamol and/or ibuprofen. **Do not allow your child to rub their 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 given instead.

If your child has an artificial lens put in, it will help him/her to see clearly in the distance, with or without the help of glasses. However, the artificial lens will not be able to change shape and focus at different distances like a natural lens can. Your child will therefore need bifocal or varifocal glasses to help him/her to see clearly at different distances. Please note that the prescription of the contact lenses or glasses may change frequently.



In addition, your child might need patching treatment to improve the eye which has weaker vision. **This treatment is absolutely crucial and families must be committed to doing this 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 put one in when your 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. However, as long as your child is regularly checked by the ophthalmologist, it should be possible to quickly identify any problem. Most side effects are mild, such as soreness, redness and bruising. Listed below are some of the more serious possible complications. Very serious complications are rare but have the potential for the sight or the eye to be permanently 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 his/her vision.

### **Glaucoma**

Glaucoma is where pressure inside the eye is increased which can gradually damage the nerve responsible for sight, causing 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 your child is six weeks of age.

### **Amblyopia (lazy eye)**

This happens 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 which will sometimes need treatment with glasses or surgery. A squint can develop in virtually all cases where







## 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](http://www.nhs.uk/choiceinthenhs)

