Cataract Surgery Complications

Important information about the potential risks associated with cataract surgery.

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It is possible for your vision to be worse following cataract surgery than it was beforehand. 1 in 100 patients will lose some vision as a direct result of the operation. One in 1000 will lose all of the vision in the eye. There is virtually no risk to the other eye. Details on the most common specific complications are given below;

**Posterior capsule rupture (PCR) and / or vitreous loss** – a split in the capsular bag which surrounds the cataract is the most common complication that arises during a cataract operation. If this should happen the operation will take longer to complete, as the vitreous jelly from the back of the eye needs to be removed from the front chamber of the eye, before placing a new implant on top of the remaining capsule. Very occasionally it is not possible to place an implant in the eye and a second operation is required. Following this complication there is an increased risk of endophthalmitis, cystoid macular oedema and of retinal detachment. You will be given additional anti-inflammatory drops, I will see you the following day and you will be followed up closely in clinic.

**The rate of PCR is universally accepted as the best indicator of surgical competence.** The PCR rate will vary according to the complexity of the cases performed by an individual surgeon, as certain conditions are associated with a higher incidence of PCR. In Gloucestershire, and in many other Eye Departments in the UK, PCR rates are recorded on an Electronic Medical Record. In the UK the average PCR rate for all cases performed by consultants 1.66%, my PCR rates for cases performed over the last 5 years are shown below.

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<th>Routine cases</th>
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<td>John Ferris</td>
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**Dropped Nucleus** – part or all of the cataract falls through a posterior capsule rupture into the back part of the eye requiring another operation to remove it. This will need to be carried out in Cheltenham General Hospital by one of my Retinal Surgical colleagues within 24-48 hours.

**Cystoid Macular Oedema** – this is caused by the blood vessels at the fine focusing part of the retina becoming leaky and the retina in that area becomes waterlogged. Macular oedema occurs in 1 in 50 cases, if the vision is reduced I will perform an OCT retinal scan to confirm the diagnosis and I will prescribe a more intensive steroid drop regime and Nevenac anti-inflammatory drops for at least 4 weeks. In the majority of cases the vision returns to normal over a 4-6 week period, but occasionally there is persistently blurred central vision.

**Endophthalmitis** – severe (usually painful) infection inside the eye. As I mentioned in the video the risk of developing endophthalmitis is in the region of 1 in every 3000 operations. **If the eye suddenly becomes red and painful and the vision starts to deteriorate please call Carole-Anne or the Winfield Hospital immediately.** Even with prompt treatment the outlook for the vision is very poor following this type of infection.

**Detached Retina** – this is when the inner layer of cells within the eye peels away from the inside of the eye. The risk of retinal detachment following uncomplicated cataract surgery is approximately 1 in 300 cases. However, the risk increases if you are very short sighted or if surgery has been complicated by a posterior capsule rupture. **If you were to develop new floaters at any point following your surgery please contact us,** as this may be a sign of a vitreous detachment (when the jelly at the back of the eye separates from the retina) which can cause a tear in the peripheral retina, that in turn can lead to a retinal detachment.

**Suprachoroidal Haemorrhage** – this is another very rare complication which occurs in approximately 1 in every 1000 cases. This type of bleeding inside the eye may require the operation to be completed on another day, but occasionally it can lead to permanent loss of the vision in the eye.
Post-operative raised intraocular pressure – the pressure within the eye can be raised in the first 24 hours after surgery. This may require treatment if the eye is still painful the following day.

Corneal oedema – waterlogging of the normally clear front window of the eye. This is more likely to occur if the pressure has been high in the eye following surgery or if the cataract has been very dense. This is usually a short lived phenomenon, but occasionally corneal oedema can take days or even weeks to resolve.

Dislocation of the Implant – movement of the intraocular lens implant. The intraocular lens is placed into the capsular bag once the cataract has been removed. The capsular bag is attached to the inside wall of the eye by thousands of suspensory fibres known as zonules. If these zonules are weak or have been damaged by previous trauma to the eye, the capsular bag may be unstable and occasionally this can lead to the implanted lens moving out of position. If this were to occur the lens may need to be repositioned or replaced with a different type of implant.

Refractive Surprise - unexpectedly large (or different from expected) post-operative refractive error. Even though the biometry calculations are very accurate occasionally patients end up being more long or short sighted, or having more astigmatism than expected. This is more likely to happen if you were very short-sighted, very long sighted, or if you have had previous laser eye surgery.
**Allergy** to drops given after the operation, causing an itchy swollen eye until the drops are changed or stopped.

**Double vision** – this is normal a transient problem and improves as the local anaesthetic wears off. If double vision persists you may require prisms incorporated into your glasses to correct it.

**Dry eyes** - cataract surgery may exacerbate the symptoms of dry eyes (burning and gritty sensation) in those patients who already have the condition and patients with no prior history of dry eyes may develop these symptoms after their surgery.

**Posterior capsular opacification (PCO)** – clouding of the membrane behind the implant causing blurred vision. This is not a complication of cataract surgery as it develops in up to 30% of patients. If you gradually develop blurred vision and glare from bright lights, 12-24 months following surgery, it is likely to be caused by PCO. If this is confirmed by your optometrist you can be referred back to see me and I will arrange laser treatment to clear away the cloudy capsule. This is an outpatient procedure which takes a few minutes to perform. Once treated the capsule cannot regrow.