

- Protective shield/ointment may cause temporary bruising of eyelids or irritation of the eyes. Redness of the eyes, blurred vision and the feeling that there is something in the eye may last for up to eight hours
- Eyelids may be swollen if your surgery needs you to be in head down position for a while e.g. prolonged keyhole surgery on the bowels
- If you have glaucoma, which causes high pressure inside your eyes, your anaesthetist will need to take extra care to protect your eyesight during surgery
- Loss of eyesight is rare under a general anaesthetic. Nevertheless, it can occur due to excessive pressure on the eyeball, due to inadequate blood supply to the eye during surgery and due to tiny clots in blood vessels to the eye. Medical conditions like diabetes, stroke and high blood pressure increase such risks. A large study found that it occurred in 1 in over 60,000 patients studied.

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Risks Associated with your Anaesthetic: damage to the eye during general anaesthesia

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Damage to the eye during general anaesthesia

What is the most common type of eye damage?

Corneal abrasion is the most common type of injury to the eye during or after a general anaesthetic. It is simply a tear or graze of the clear outer layer of the eye (cornea). It can cause pain, irritation or blurring of vision for a few days. However, almost all corneal abrasions heal without any long term effects on vision.

How do corneal abrasions occur?

Under a general anaesthetic, you lose the ability to close your eyelids fully and also produce fewer tears. This leads to a dry and unprotected cornea. The dry cornea may stick to the inside of the eyelid and the abrasion occurs when the eye opens again at the end of the anaesthetic. Corneal damage may also occur when something rubs against the exposed cornea while you are anaesthetised.

Anaesthetists take care to protect the eyes and ensure that the eyes are closed during a general anaesthetic.

What is done to prevent corneal abrasions?

- To prevent your eye becoming dry, soft transparent shields are used to keep the eyelids fully closed during a general anaesthetic. These protect the cornea and keep it moist.
- Alternatively, your anaesthetist may use a gel, an ointment or eye drops to moisten your eyes during your anaesthetic. These are helpful if shields cannot be used or if your eyes need to be opened briefly during some types of surgery. However, eye ointments may cause temporary blurring of vision or irritation following an anaesthetic.
- Anaesthetists are trained to take care that nothing rubs against your eyes. If your surgery requires you to be positioned on your front, special goggles, eye pads or cushions may be used to protect your eyes.

Damage to the eye during general anaesthesia

How often do corneal abrasions occur?

A large study found that 1 in 2,800 patients having a general anaesthetic suffered from a corneal abrasion that caused symptoms. Studies have also shown that 1 in 25 patients may have small corneal abrasions which the patient does not even notice. These occur even when protective eye shield or eye ointment is used. You are more likely to suffer from a corneal abrasion if your surgery requires you to be positioned lying on your front or your side, if your operation lasts a long time, or if you are having surgery on your head and neck.

What if I already have poor vision?

It is always helpful if you inform your anaesthetist before your operation about any concerns you may have about your vision. This is because he/she can give you any extra information that you need to help you feel at ease if you cannot see well.

However, this will not make any difference to the risk of getting a corneal abrasion, or to the ways in which your anaesthetist cares for your eyes while you are under a general anaesthetic.

What happens if I have a corneal abrasion?

Corneal abrasion may be very painful. Treatment is aimed at reducing pain and preventing an eye infection. This may involve eye drops, ointments, an eye patch as well as pain relieving medicines. Almost all corneal abrasions heal with no visible scar and no long-term effects on vision.

What other eye damage can occur?

- Pressure on the nerves in the eyebrow area may cause a temporary droopy eyelid. This is usually temporary and should recover.