Prostaglandin analogues (eg lumigan, travatan, xalatan) are preferred first line agents for glaucoma. They are usually very well tolerated but may cause increased pigmentation (such as darker, and longer, eyelashes in some people; and some darkening of the iris). More frequently, some minor irritation may be experienced with drop instillation (which applies to all glaucoma medications) and in addition some redness of the eyes may develop when the medication is started for the first time. This generally reduces over the subsequent weeks, and improves with time.

Alpha agonists (eg alphagan). These drops work mainly by reducing the production of aqueous fluid in the eye. Typically, these drops are used twice a day. Possible side-effects include a dry mouth, and dizziness. Alphagan is not given to children as it may cause marked drowsiness in children. Alphagan is now available in combination with timolol (Combigan).

Cosopt (timolol + trusopt) is a preferred second line agent for glaucoma. It is usually very well tolerated but may cause some stinging on instillation. It contains beta blocker medication, and this is avoided in patients with any respiratory problems such as asthma. Also a possible side effect of beta blockers is dizziness, and this drug is therefore avoided in patients experiencing such a symptom.

Carbonic anhydrase inhibitors (eg Trusopt, Azopt). These drops reduce the production of fluid in the eye and are used 2-3 times daily. Trusopt sometimes stings on instillation, and generally is preferred in combination with a beta-blocker (eg cosopt).

Miotics (parasympathomimetics) eg pilocarpine
These drops are usually used four times a day (Pilogel is taken once daily). They increase the drainage of fluid out of the eye. These drops cause a small pupil which may mean that they cause a reduction in vision. They may give rise to headache, particularly in the first 2 weeks of taking. These drops were the original drops to be used for glaucoma but are now less commonly used as others are often better tolerated.

Other glaucoma treatments

Should I Use Marijuana to Treat Glaucoma?
Eye drop treatment for glaucoma

The American Academy of Ophthalmology offer the following advice: "Based on a lack of scientific evidence, the American Academy of Ophthalmology does not endorse the use of marijuana to treat glaucoma. The Academy believes there is no evidence to date that shows that marijuana is safer or more effective than the drugs currently available to lower IOP to prevent optic nerve damage from glaucoma. This conclusion is based on reviews from the National Eye Institute (NEI) and the Institute of Medicine, as well as on available scientific evidence."

Putting in eye drops - try to keep your eyes open and allow drop to fall into corner of the eye nearest the nose.