

IMAGE: GETTYIMAGES

The microscopic implant that treats glaucoma

Glaucoma can lead to sight loss – even blindness – if it’s not diagnosed and treated early. Consultant Ophthalmic Surgeon, Gok Ratnarajan describes the treatments that could help save your sight.

Mr Gok Ratnarajan
BSc MBBS FRCOphth MD



Q. What is glaucoma?

A. 'Glaucoma is a serious, progressive eye disease. If left untreated, it can lead to blindness. Glaucoma usually occurs when the optic nerve is damaged by an increase in the pressure of the fluid in the eye when the fluid can't drain properly.

'It's estimated that around half a million people in the UK are currently diagnosed with glaucoma - but that many more are going undiagnosed and experiencing the steady, permanent eye damage glaucoma can cause without realising they have the condition.'

Q. So I can have glaucoma without realising it?

A. 'Yes. We call glaucoma the 'silent thief of sight', because there are often no obvious symptoms until significant damage has been done to the eye. The less sensitive peripheral vision - your side vision - is usually the first to be affected by pressure damage to the optic nerve, which can be difficult to detect without an eye test.'

Q. How should I protect my sight then?

A. 'Annual eye tests are the best way to check the health of your eyes and for the start of glaucoma. Free eye tests are available on the NHS if you are over 60, or, if you are over 40 and have close family that have been diagnosed with glaucoma as you are considered to be at a greater risk of developing glaucoma. (Other circumstances can entitle you to free eye tests too - go to nhs.uk for a full list).'

Q. What will happen if I'm found to have glaucoma?

A. 'Damage to the optic nerve from glaucoma is permanent and irreversible, so it's really important to get the fluid pressure in the eye under control as quickly as possible. The most common treatment for this at the moment is prescription eye drops, sometimes up to three or four different types in combination - which will help to slow fluid production and/or increase drainage out of the eye - and will sometimes need to be applied up to three times a day, every day, for the rest of your life.'

Q. Daily eye drops sound like hard work. Is there an alternative?

A. Yes. The eye drops needed to treat glaucoma can cause uncomfortable reactions in some people like redness, soreness and dryness. The commitment required to use them regularly can be problematic for some people too, particularly if some of the drops need to be kept refrigerated, or instilled frequently - which is where MIGS, Minimally Invasive Glaucoma Surgery can help.

Q. Eye surgery? Isn't that a bit extreme?

A. 'No. Surgery used to be reserved for only the most severe cases of glaucoma - but things have moved on dramatically in the last 10 years, and there are now highly-refined, safe and minimally-invasive surgical techniques we can use that can be performed under local anaesthetic in no time at all, which can help control glaucoma and potentially reduce the need for eye drops.

'Glaucoma laser surgery is an option - but one of the most effective MIGS for controlling open-angle glaucoma (the most common form of the disease) at the moment involves inserting two tiny 0.4mm titanium iStent inject® implants in the eye's natural drainage pathway to help control intra-ocular eye pressure.'

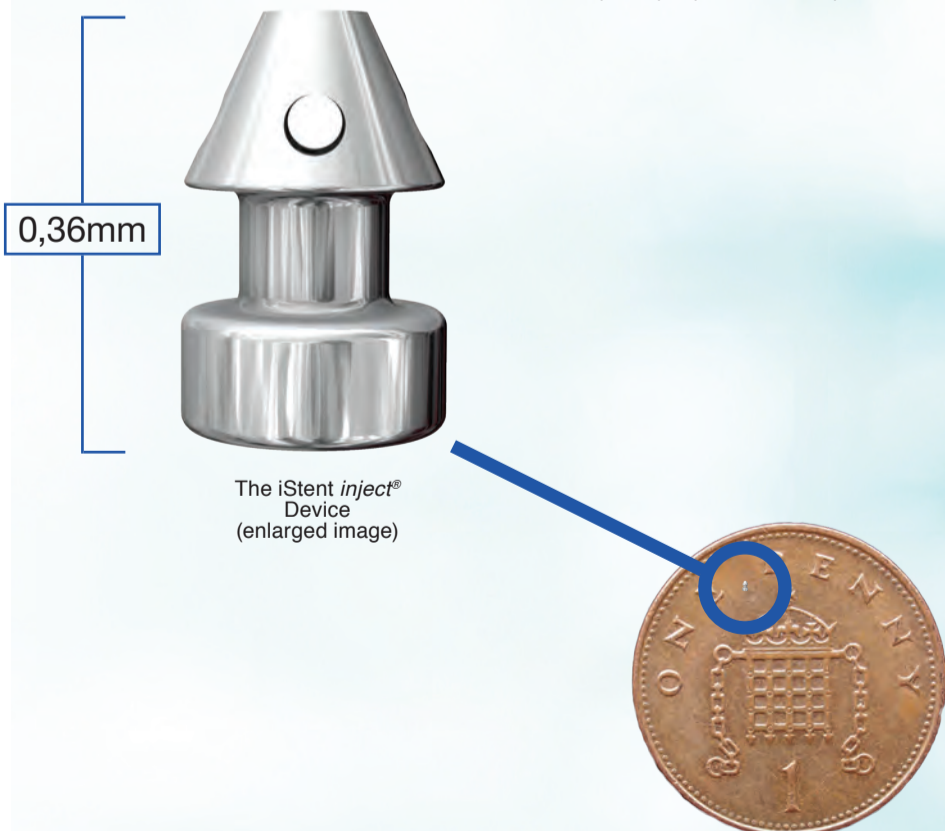
Q. Surely putting titanium stents into an eye is asking for trouble?

A. 'No. It's a safe surgery, with a significant number of studies to back up its efficacy and safety'. The procedure is performed under local anaesthetic while you're awake. It's painless and takes just five to ten minutes. We often recommend, where appropriate, adding it into cataract surgery if someone has both cataracts and glaucoma. You can't see the stents once they are in place and visual recovery is rapid. There is a very good chance that patients will be on a reduced number of eye drops or none at all (under the management of the ophthalmologist). More than 400,000² implants that have been implanted globally.'

Q. How can I get this treatment?

A. 'First, you need to see a consultant for a full assessment of your condition, to find out if it's suitable for you. It's available through the NHS in some areas - usually, where appropriate, as an add-on to cataract surgery or for uncontrolled eye pressure problems. It's also available through some private healthcare schemes. ■

Mandy Francis



The iStent inject® Device (enlarged image)

About Glaukos

Glaukos Corporation is an ophthalmic medical technology company focused on the development and commercialisation of breakthrough products and procedures designed to transform the treatment of glaucoma, one of the world's leading causes of blindness.

Our mission is to pioneer and lead the global glaucoma market with micro-scale injectable therapies that advance the existing glaucoma standard-of-care and enrich the lives and treatment alternatives for glaucoma patients worldwide.

About Gok Ratnarajan

Mr Gok Ratnarajan BSc MBBS FRCOphth MD is a full-time Consultant Ophthalmic and Glaucoma Surgeon at the world-renowned Eye Unit in Queen Victoria NHS Foundation Trust in East Grinstead, West Sussex. Actively involved in clinical research, he publishes regularly in peer-reviewed journals and has won numerous awards for his research at national and international level. ■

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