

# HEALTH

## THE EYES HAVE IT GLAUCOMA HITS TWO PER CENT OF OVER-40S, BUT NEARLY HALF OF SUFFERERS ARE CURRENTLY UNAWARE THEY EVEN HAVE IT

BY JEAN-PAUL AUBIN-PARVU

It is estimated that two per cent of the population over the age of 40 have glaucoma. Although more prevalent in the elderly, those who are short sighted, diabetic or who have a family history of glaucoma also face a higher risk. It often affects both eyes, usually in varying degrees, and one eye may develop the disease quicker than the other. Left untreated, glaucoma can lead to blindness.

“Glaucoma is a disease of the optic nerve – put very simply,” says Mr Vik Sharma, consultant ophthalmic surgeon and the medical director at the London Ophthalmology Centre. “Glaucoma is actually a group of conditions. Most are associated with increased pressure in the eyeball, which is thought to damage the optic nerve and, therefore, damage your sight. There is a subset of glaucoma where the pressure is not higher than normal, but these patients still develop the disease with the nerve damage and the loss of vision. And even with those patients it has been shown that to lower the pressure further is of benefit to them in reducing their risk.”

Nearly half of those suffering from glaucoma are unaware they have the disease, because it develops without any obvious symptoms. That is until a serious loss of vision occurs. “And that’s our biggest problem – to actually find glaucoma early and to prevent it from causing any visual loss to our patients.”

Many of us leave too long a gap between eye tests. “We need to do it more often,” says Mr Sharma. “If you look at the figures, we don’t diagnose eye diseases early enough compared to other countries. We should be encouraging most people to go to the opticians at least once every two years as a bare minimum.”

But even then there’s no guarantee that glaucoma will be detected. “The standard eye test includes an air puff test to record the eye pressure, but other tests vary from optician to optician – for example, whether they also look at the back of your eye to check the nerve,” says Mr Sharma. “There was some interesting work done in Europe showing that if you relied simply on pressure checks to pick





up glaucoma you would miss 60 per cent. If you've got a high pressure glaucoma then you'll hopefully get it detected by the air puff test. But the problem is there are a whole group of patients that don't have high pressure glaucoma, and indeed even in high pressure glaucoma the pressure dips up and down. If you are at increased risk then I would suggest you make sure your nerve is looked at, perhaps also a field of vision test."

Glaucoma creeps in slowly. Most people first lose sight in their peripheral vision before central vision is affected. As any existing damage cannot be reversed, early detection, diagnosis and treatment is vital. "And for people who are treated early, the vast majority never go on to ever develop any damage to their vision."

The London Ophthalmology Centre conducts a range of specialist examinations in its glaucoma check. "For example, nerve scans, where we scan the back of the eye and look at the invisible layer that makes up the nerve," says Mr Sharma. "And that tells us whether you may have early damage from glaucoma, which before was not detectable."

Visual field tests using the latest Short Wave Analysis Perimetry software allow glaucoma to be detected up to five years earlier than was previously possible. Ocular Blood Flow measurements may also be taken as the latest research has shown clearly that patients with glaucoma have reduced blood flow (oxygen) in the optic nerve.

Eye pressure is checked using an applanation tonometry machine, because this is more accurate than a standard air puff test. The thickness of the cornea has been shown to influence eye pressure readings. Therefore, a corneal pachymetry ultrasound measures the thickness of the cornea to determine how

accurate the pressure readings are. "In the past we used to treat people and say: 'You haven't got glaucoma because your pressure is low,'" says Mr Sharma, "but in fact they did have glaucoma – they just had thin corneas and their pressure was always underestimated. And a subset of patients were told they had glaucoma as they had high readings, but in fact this was because their windows were thicker than average."

Treating glaucoma centres on lowering the eye pressure. "The main way is by using eye drops, because they're safe, effective and convenient for most patients," says Mr Sharma. The drops contain a chemical mediator found in the body, which has shown to be highly effective at lowering eye pressure. "And the lower the pressure, the lower the risk you are going to get any damage from glaucoma."

A second option is laser treatment. "Laser treatments work mainly to facilitate outflow of fluid from the eye through the normal channels that drain the fluid," says Mr Sharma. "The lasers we use here are incredibly safe and painless, and are effective in about 80 per cent of patients to help lower the pressure."

However, the laser treatment is not permanent. "It lasts a few years," says Mr Sharma. "So you still need to stay under monitoring, just like with the eye drops. You need to be monitored at least once every six months, if not sooner, to make sure that your pressure is still under control."

## LINKS

**London Ophthalmology Centre**  
Queen Anne Medical Centre  
18-22 Queen Anne Street  
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The third option is surgery. "Surgery has long been established as a gold standard in lowering eye pressure," says Mr Sharma. "Obviously surgery carries small risks and we would only advocate surgery when the patient is either unable to tolerate the drops or the laser is ineffective. Surgery entails making a channel to allow fluid to drain through the wall of the eye into the skin of the eye. The problem is that your body will normally try to heal it up, but we can offer anti-scarring agents to keep the channel open. We use little releasable stitches that can be released if the pressure creeps up in the future. And nowadays we have micro implants – mini tubes that sit in the channel we've created and not only make the surgery safer, but allow the eye to recover quicker and also increase the chance of success."

Where glaucoma is caught early the long term prognosis is very good. "If you respond to treatment and your nerve is fairly healthy to start with then I would say you've got nothing to worry about," says Mr Sharma. "We are all guilty of going on the internet and reading about things – and glaucoma is a scary disease. But the vast majority of patients when they are treated and under the care of an ophthalmologist actually don't come to any harm."