NHS
National Institute for Health and Clinical Excellence

Understanding NICE guidance

Information for people who use NHS services

Treating open angle glaucoma by removing a small strip of tissue to reduce pressure within the eye

NICE 'interventional procedures guidance' advises the NHS on when and how new procedures can be used in clinical practice.

This leaflet is about when and how a procedure to remove a small strip of tissue to reduce pressure within the eye can be used in the NHS to treat people with open angle glaucoma. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

Interventional procedures guidance makes recommendations on the safety of a procedure and how well it works. An interventional procedure is a test, treatment or surgery that involves a cut or puncture of the skin, or an endoscope to look inside the body, or energy sources such as X-rays, heat or ultrasound. The guidance does not cover whether or not the NHS should fund a procedure. Decisions about funding are taken by local NHS bodies (primary care trusts and hospital trusts) after considering how well the procedure works and whether it represents value for money for the NHS.

NICE has produced this guidance because the procedure is quite new. This means that there is not a lot of information yet about how well it works, how safe it is and which patients will benefit most from it.

This leaflet is written to help people who have been offered this procedure to decide whether to agree (consent) to it or not. It does not describe open angle glaucoma or the procedure in detail – a member of your healthcare team should also give you full information and advice about these. The leaflet includes some questions you may want to ask your doctor to help you reach a decision. Some sources of further information and support are on the back page.

Information about NICE interventional procedure guidance 397
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What has NICE said?

This procedure can be offered routinely as a treatment option for people with glaucoma provided that doctors are sure that:

- the patient understands what is involved and agrees to the treatment, and
- the results of the procedure are monitored.

Doctors working in hospital departments that specialise in treating glaucoma (and offer a range of treatment options) should decide which patients might benefit from the procedure.

NICE has encouraged further research into how well this procedure works in the long term.

Other comments from NICE

Compliance with glaucoma medication is often poor, and the usual surgical treatment is a more invasive procedure called trabeculectomy. Alternative procedures such as this one might offer advantages to some patients.

Treating open angle glaucoma by removing a small strip of tissue to reduce pressure within the eye

This procedure may not be the only possible treatment for glaucoma. Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.

The medical name for this procedure is 'trabeculotomy ab interno for open angle glaucoma'.

The procedure is not described in detail here – please talk to your specialist for a full description.

Chronic open angle glaucoma is usually caused by an increase in internal eye pressure (also known as intraocular pressure, or IOP) due to the build up of fluid. As it progresses it causes visual impairment and if untreated may lead to blindness. Treatment usually involves eye drops containing different drugs that reduce the production or increase the absorption of fluid. Surgery aims to reduce the pressure in the eye by increasing the drainage of fluid from the eye.

This procedure uses a specially designed surgical instrument to remove a portion of tissue (the trabecular meshwork) to improve the drainage of fluid from the eye. The surgery is done through a tiny incision on the side of the eyeball, which avoids the need for a 'bleb' to be created (this is a bit like a reservoir that fluid drains into). Blebs can leak and cause other eye problems. The procedure is carried out using a local anaesthetic.

What does this mean for me?

NICE has said that this procedure is safe enough and works well enough for use in the NHS. If your doctor thinks it is a suitable treatment option for you, he or she should still make sure you understand the benefits and risks before asking you to agree to it.

You may want to ask the questions below

- What does the procedure involve?
- What are the benefits I might get?
- How good are my chances of getting those benefits? Could having the procedure make me feel worse?
- Are there alternative procedures?
- What are the risks of the procedure?
- Are the risks minor or serious? How likely are they to happen?
- What care will I need after the operation?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

Summary of possible benefits and risks

Some of the benefits and risks seen in the studies considered by NICE are briefly described below. NICE looked at 8 studies on this procedure.

You might decide to have this procedure, to have a different procedure, or not to have a procedure at all.

How well does the procedure work?

Three studies involving a total of 705 patients who had the procedure reported that the procedure was successful in 65% to 91% of patients, with pressure within the eye being reduced. Three studies involving a total of 1762 patients reported that patients did not need as many glaucoma medications following the procedure.

In 2 studies involving 2516 patients who had the procedure, 361 needed further surgery at up to 5 years after the procedure.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that the main aim of the procedure is to reduce the pressure within the eye.

Risks and possible problems

Two studies involving 1741 patients reported that in 108 patients, the pressure within the eye increased after the procedure. One of the studies (of 1688 patients) also reported low pressure in 24 patients. The same study also reported damage to the cornea in 4 patients.

A study of 53 patients reported that 6 patients developed a cataract that did not affect their vision, and 3 patients developed a cataract that meant that they could read 1 line less on a standard eye test chart.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that possible complications include blood inside the eye, damage to the iris and lens, and scarring, which could mean that the procedure is no longer effective after 6–12 months.

More information about glaucoma

NHS Choices (**www.nhs.uk**) may be a good place to find out more. Your local patient advice and liaison service (usually known as PALS) may also be able to give you further information and support. For details of all NICE guidance on glaucoma, visit our website at **www.nice.org.uk**

About NICE

NICE produces guidance (advice) for the NHS about preventing, diagnosing and treating different medical conditions. The guidance is written by independent experts including healthcare professionals and people representing patients and carers. They consider how well an interventional procedure works and how safe it is, and ask the opinions of expert advisers. Interventional procedures guidance applies to the whole of the NHS in England, Wales, Scotland and Northern Ireland. Staff working in the NHS are expected to follow this guidance.

To find out more about NICE, its work and how it reaches decisions, see **www.nice.org.uk/aboutguidance**

This leaflet is about 'Trabeculotomy ab interno for open angle glaucoma'. This leaflet and the full guidance aimed at healthcare professionals are available at **www.nice.org.uk/guidance/IPG397**

You can order printed copies of this leaflet from NICE publications (phone 0845 003 7783 or email publications@nice.org.uk and quote reference N2553). The NICE website has a screen reader service called Browsealoud, which allows you to listen to our guidance. Click on the Browsealoud logo on the NICE website to use this service.

We encourage voluntary organisations, NHS organisations and clinicians to use text from this booklet in their own information about this procedure.

National Institute for Health and Clinical Excellence
MidCity Place, 71 High Holborn, London, WC1V 6NA; **www.nice.org.uk**

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