

# Trabecular stent bypass microsurgery for open-angle glaucoma

Information for the public

Published: 22 February 2017

[www.nice.org.uk](http://www.nice.org.uk)

## What has NICE said?

Trabecular stent bypass microsurgery for open-angle glaucoma is safe enough and works well enough for use in the NHS.

### What does this mean for me?

Your health professional should fully explain what is involved in having this procedure, and discuss the possible benefits and risks with you. You should also be told how to find more information about the procedure. All of this should happen before you decide whether you want to have this procedure or not.

### Other comments from NICE

NICE said the evidence about this procedure is mostly for 1 device, although there are several devices available.

## Your healthcare team

The procedure should only be done by clinicians with specific training in trabecular stent bypass microsurgery.

# The condition

Open-angle glaucoma is an eye condition in which the nerve connecting your eye to your brain (the optic nerve) becomes damaged. It usually occurs when the fluid in the eye can't drain properly. This increases the pressure inside the eye, which puts pressure on the optic nerve. At first there are no symptoms but it causes sight problems and may lead to blindness.

Treatment usually involves eye drops containing drugs that reduce the production, or increase the absorption, of fluid in the eye. Surgery aims to reduce pressure by increasing the drainage of fluid from the eye.

NICE has looked at using [trabecular stent bypass microsurgery](#) as another treatment option.

[NHS Choices](#) and [NICE's information for the public on glaucoma](#) may be a good place to find out more.

# The procedure

This procedure involves inserting a small tube (stent) into the eye. The aim is to improve drainage of fluid from the eye. Under local anaesthesia, a small cut is made in the side of the eye to gain access inside the eye. One or more stents are put into the eye. The procedure may be done at the same time as cataract surgery.

# Benefits and risks

When NICE looked at the evidence, it decided that there was enough evidence to show that it is safe enough and works well enough for use in the NHS. The 8 studies that NICE looked at involved a total of 3,096 patients.

Generally, they showed the following benefits:

- lower pressure in the eye, up to 5 years after the procedure
- less use of medication for glaucoma
- successful procedure in nearly all patients.

The studies showed that a small number of people had problems after the procedure, and some of these were serious. The risks included:

- significantly worse vision after the procedure in 1 patient and decreased vision in 7 eyes
- increased pressure in the eye in up to 50% of patients in 1 of the studies
- bleeding in the eye in about 2% of patients
- damage or changes to structures in the eye in about 2% of patients
- dry eye in about 2% of patients
- the stent not in the correct place in 2 to 18% of patients
- the stent becoming blocked in 4 to 15% of patients
- some people needing a second procedure to reposition the stent or to insert a replacement stent.

If you want to know more about the studies, see the [guidance](#). Ask your health professional to explain anything you don't understand.

## Questions to ask your health professional

- 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 procedure?
- What happens if something goes wrong?
- What may happen if I don't have the procedure?

## About this information

NICE [interventional procedures guidance](#) advises the NHS on the safety of a procedure and how well it works.

ISBN: 978-1-4731-8586-9

## Accreditation

