Understanding NICE guidance
Information for people who use NHS services

Tonsillectomy using laser

This leaflet is about when and how tonsillectomy using laser can be performed in the NHS in England, Wales, Scotland and Northern Ireland. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

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 tonsillectomy using laser in detail – a member of your healthcare team should also give you full information and advice about this. The leaflet includes some questions you may want to ask your doctor to help you reach a decision.

Interventional procedure guidance makes recommendations on the safety of a procedure and how well it works. 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.
What has NICE said?

This procedure can be offered routinely as a treatment option for people who need their tonsils removed 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.

Bleeding (haemorrhage) after tonsillectomy using laser may be more common than with other procedures to remove tonsils. Surgeons should be specifically trained in using lasers before carrying out the procedure.

Surgeons should also ensure patients understand the risk of bleeding after this procedure.

Other comments from NICE

Surgeons should be trained in traditional tonsillectomy techniques, the use of stitches to control bleeding, and electrosurgical techniques.

Tonsillectomy using laser

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

Tonsillectomy is surgery to remove the tonsils. It may be recommended to help patients who repeatedly get tonsillitis, or abscess (a collection of pus in the body, caused by infection) on the tonsils. It may also be offered to patients when the tonsils block the pharynx (back of the throat) or cause difficulty with breathing when sleeping.

The standard operation involves cutting the tonsils out using a surgical blade (known as cold-steel surgery) and then stopping any bleeding by applying pressure to the area. Sometimes the blood vessels are tied to stop them bleeding, and sometimes the blood vessels are sealed using heat.

Lasers are used in tonsillectomy to cut away the tonsils. The heat from the laser seals the blood vessels shut.
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 nine studies on this procedure.

How well does the procedure work?

The studies found that pain in the first 24 hours after surgery was generally lower after tonsillectomy using laser than after traditional tonsillectomy. However, pain in the longer term (until at least 2 weeks after surgery) was usually worse after laser tonsillectomy than after traditional tonsil removal.

Healing of the wound after laser tonsillectomy was generally slower when compared with traditional tonsillectomy.

Most of the expert advisers agreed that this procedure is effective, although only a few surgeons in the UK use lasers for tonsillectomy.

Risks and possible problems

Bleeding is a serious problem with tonsillectomy. It can occur during the operation, during the first 24 hours after the operation (known as primary haemorrhage) or after 24 hours (referred to as secondary haemorrhage). A patient may have to be re-admitted to hospital because of haemorrhage, and may occasionally need another operation.

In general there was less bleeding during surgery with laser than with traditional tonsillectomy.

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 tonsillectomy using laser 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?
The number of people who experienced primary haemorrhage varied between the studies. In one study, 9 out of 79 patients (11%) had primary haemorrhage after tonsillectomy using laser compared with 4 out of 72 patients (6%) who had traditional tonsillectomy.

The number of people who experienced secondary haemorrhage varied from 0% to 19%. In one study in which patients had one tonsil removed by laser and the other by traditional tonsillectomy, secondary haemorrhage occurred on the laser side in 6 out of 38 patients; 2 of these patients had to be re-admitted to hospital. Secondary haemorrhage did not occur in the traditional tonsillectomy side in any patient. The highest rate of secondary haemorrhage in the studies was 19% (10 out of 54 patients). In this study, one patient had their tongue burned by the laser.

In two studies (of 86 and 66 patients), there were no problems relating to surgery, anaesthesia or bleeding.

The National Prospective Tonsillectomy Audit has reported that the lowest rates of secondary haemorrhage occur in traditional tonsillectomy with stitches to control bleeding and that higher rates were associated with other techniques.

The expert advisers said that there is a slightly higher risk of haemorrhage after tonsillectomy using laser compared with traditional tonsillectomy. They also noted that there is a risk of damage from the laser to the patient’s face and a risk of heat damage to the upper airways.

**More information about tonsillectomy**

NHS Direct online ([www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)) may be a good starting point for finding out more. Your local Patient Advice and Liaison Service (PALS) may also be able to give you further advice and support.