

# Transoral carbon dioxide laser surgery for primary treatment of oropharyngeal malignancy

Information for the public

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

## What has NICE said?

This procedure is safe enough and works well enough for use in the NHS.

The procedure should only be done by health professionals with special training in carbon dioxide laser surgery in the oropharynx.

NICE is asking health professionals to send information about everyone who has the procedure and what happens to them afterwards to a database on head and neck cancers at the Health and Social Care Information Centre.

## 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.

Your health professional may ask you if details of your procedure can be collected.

## Other comments from NICE

NICE said that some of the evidence it looked at on carbon dioxide laser surgery included patients with tumours in different areas of the body and at various stages. Most patients in the studies received other treatments as well as the carbon dioxide laser surgery. It also said that all the patients that commented on this procedure were positive about it.

## Your healthcare team

A special healthcare team should decide which patients should be offered this procedure. The team is described in [NICE guidance on how to organise services for head and neck cancer](#).

## The condition

Tumours in the [oropharynx](#) can cause a sore throat, ulcers in the mouth or throat, white or red patches that may be swollen or bleeding, difficulty swallowing, and pain in the ear. They can be treated with combinations of surgery, radiotherapy and chemotherapy.

NHS Choices ([www.nhs.uk](http://www.nhs.uk)) may be a good place to find out more.

NICE has looked at using transoral carbon dioxide laser surgery as another treatment option. Click on to the next page to find out more.

## The procedure

The procedure is usually done with the patient under a general anaesthetic. The surgeon usually uses a small camera on a thin, flexible tube to guide a laser through the open mouth. The laser is used to cut out the tumour and a small amount of the healthy flesh around it. Large tumours can be removed in several pieces. Sometimes the lymph nodes are also removed (if they are swollen or it is suspected that the cancer has spread to

them). Sometimes the patient also has radiotherapy or chemotherapy.

## Benefits and risks

When NICE looked at the evidence, it decided that this procedure is safe enough and works well enough for use in the NHS. The 7 studies that NICE looked at involved a total of 728 patients.

Generally, they showed that:

- About the same number of people were still alive after 5 years when treated with transoral carbon dioxide laser surgery as with electrocautery (in which the tumour is removed using electrical energy).
- Survival rates were improved by patients having radiotherapy after the procedure.
- Three out of 69 patients in 1 study had their disease come back after slightly less than 2 years.

The studies showed that the risks of [transoral carbon dioxide laser surgery](#) included:

- bleeding in the first week after the procedure (including 1 death from severe bleeding)
- severe difficulty swallowing, and food or liquid going down the wrong way, which can cause choking and chest infections
- the airway becoming blocked during the procedure, which needed surgery
- the need to have a permanent or temporary tracheostomy (a hole through the neck into the windpipe) to breathe
- nerve damage.

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?

## Medical terms explained

### Oropharynx

The part of the throat that includes the back of the tongue, the soft upper part of the back of the mouth and the tonsils.

## About this information

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

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## Accreditation

