

# Minimally invasive video-assisted thyroidectomy

Information for the public

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

## What has NICE said?

Minimally invasive video-assisted thyroidectomy is safe enough and works well enough for use in the NHS. It should only be done by doctors with specific training and experience in the procedure.

### 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 this procedure is only suitable for a few patients whose thyroid glands are small enough.

## Your healthcare team

A healthcare team experienced in thyroid surgery should decide who should be offered this procedure, and should carry out the treatment.

## The condition

The thyroid gland is in the neck. It produces thyroid hormones, which affect the body's growth and metabolism. Sometimes the gland can swell, or become overactive (hyperthyroidism) and produce too much hormone. This can cause symptoms such as anxiety, weight loss, breathlessness, tiredness and eye problems.

Cancer of the thyroid can also occur and causes the gland to get bigger. Symptoms of thyroid cancer include swellings in the neck, difficulty swallowing or breathing, hoarseness, and pain in the throat or neck.

Patients with an overactive thyroid are first treated with medicines to reduce the production of thyroid hormones, or radioiodine treatment to destroy some of the thyroid gland. If these don't work or are unsuitable, part or all of the thyroid gland can be removed surgically. The most common treatment for thyroid cancer is surgery. Usually, surgery is done using an 'open' technique, in which a cut of about 4-8 cm long is made across the front of the neck. Techniques using keyhole surgery have also been developed, which can be done with a smaller cut.

NICE has looked at using [minimally invasive video-assisted surgery](#) as another treatment option.

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

## The procedure

Minimally invasive (keyhole) video-assisted surgery to remove the thyroid gland is usually done under general anaesthesia. It involves making a small cut of about 2 cm in the centre of neck just above the breastbone. The surgeon then inserts a thin flexible tube with a camera on the end through the cut. This sends pictures to a screen to help the surgeon see the thyroid gland and surrounding tissue. Surgical instruments are inserted through the cut to remove part or all of the gland, depending on the underlying condition.

The aim of video-assisted keyhole surgery is to be able to use smaller cuts than with 'open' surgery, so that there is less pain and scarring after surgery.

## Benefits and risks

The evidence that NICE looked at for video-assisted keyhole surgery to remove the thyroid gland showed that the procedure was safe enough and worked well enough to be used on the NHS for this condition.

The 10 studies that NICE looked at involved a total of 2300 patients treated by video-assisted keyhole surgery.

Generally, they showed the following benefits:

- 87% of patients with thyroid cancer were disease-free about 3.5 years after surgery
- thyroid cancer hadn't come back in any patients and no patients died because of the disease up to about 5 years after treatment
- 1-7% of patients who started having video-assisted keyhole surgery had to change to have open surgery
- less pain 24-48 hours after the operation
- better cosmetic results and more satisfaction with the outcome
- less risk of the voice and swallowing being affected.

The studies showed that the risks included:

- a side effect or complication in 10% of patients
- paralysis of a nerve going to the voice box in 1-2% of patients, which can affect ability to make high-pitched sounds
- damage to a nerve going to the voice box in 2% of patients, which can cause changes such as difficulty in speaking or swallowing
- bleeding after the operation in 1 patient, who needed more surgery
- wound infection in 2 patients

- underactive parathyroid glands in 4 patients
- low calcium levels in the blood, which was temporary in 12 patients and permanent in 2 patients
- a skin burn in 5 patients.

NICE was also told about another possible risk: bruising.

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.

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## Accreditation

