

Treating Barrett's oesophagus with low-grade or no dysplasia with endoscopic radiofrequency energy

Information for the public

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What has NICE said?

This procedure is safe enough and works well enough for Barrett's oesophagus with low-grade dysplasia for use in the NHS, as long as patients are followed up in the long term.

There is not enough evidence to be sure about how well this procedure works or how safe it is for Barrett's oesophagus with no dysplasia. For this reason, it should only be done for Barrett's oesophagus with no dysplasia as part of a research study.

NICE is asking health professionals to send information about everyone who has the procedure and what happens to them afterwards to a database at the UK national HALO patient registry, so that the safety of the procedure and how well it works can be checked over time.

NICE has said that more research on this procedure for Barrett's oesophagus with no dysplasia is needed.

What does this mean for me?

Your health professional should fully explain what is involved in having endoscopic radiofrequency energy for Barrett's oesophagus with low-grade dysplasia, and discuss the possible benefits and risks with you. You should also be told how to find more information about the procedure. You should only be asked whether you want to agree to this procedure after having this discussion.

Your health professional can only offer you this procedure for Barrett's oesophagus with no dysplasia as part of a research study.

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

Your healthcare team

A healthcare team experienced in managing Barrett's oesophagus should decide which patients should be offered this procedure.

This procedure should only be done by endoscopists with experience in treating Barrett's oesophagus with radiofrequency energy.

The condition

Barrett's oesophagus is a condition in which there are changes in the cells lining the lower part of the oesophagus. The first sign of change is called Barrett's oesophagus with no dysplasia, meaning that the cells are no longer 'normal' but there is no evidence of dysplasia. The cells may then develop an abnormality called dysplasia (sometimes described as 'precancerous' cells). There are 2 types of dysplasia – low-grade and high-grade. There is a small risk that these cells will become cancerous over time. The risk of cancer developing is greater with high-grade than with low-grade dysplasia. People who have Barrett's oesophagus with no or low-grade dysplasia may be offered regular checks using an endoscope and taking a small sample of cells (a biopsy) to look for signs of high-grade dysplasia or cancer. Several procedures have also been developed that aim to remove dysplasia, such as devices using laser or cold energy.

NICE has looked at using [radiofrequency energy](#) as another treatment option.

[NHS Choices](#) and NICE's information for the public about [ablative therapy for Barrett's oesophagus](#) may be a good place to find out more.

The procedure

The aim of this procedure is to use radiofrequency (heat) energy to destroy the abnormal cells and to promote the growth of healthy normal cells. The medical name for this procedure is 'epithelial radiofrequency ablation'. The procedure is done while the patient is conscious but sedated. The doctor passes an [endoscope](#) down the patient's [oesophagus](#). A small probe is then guided to the area of abnormal cells. The probe delivers a few seconds of radiofrequency energy at a time (in pulses) to destroy a thin layer of abnormal cells around the inside of the oesophagus. Repeat treatment sessions may be necessary if any abnormal cells are noted at follow-up.

Benefits and risks

The evidence that NICE looked at for [Barrett's oesophagus with low-grade dysplasia](#) showed that the procedure was safe enough and worked well enough to be used in the NHS for this condition.

When NICE looked at the evidence for [Barrett's oesophagus with no dysplasia](#), it decided there wasn't enough evidence to be sure how well the procedure worked and that it should only be used in a research study for this condition.

The 9 studies that NICE looked at involved a total of 815 patients. Generally, they showed the following benefits:

- complete removal of low-grade dysplasia in most patients
- reduced risk of low-grade dysplasia progressing to high-grade dysplasia or cancer in patients regularly followed-up
- complete removal of no dysplasia in about 50% of patients after 1 year and, after 5 years, in about 90% of patients who still had disease after 1 treatment when they were retreated.

The studies showed that the risks of radiofrequency energy included:

- scarring causing narrowing of the oesophagus (called oesophageal stricture) in about 12% of patients, which needed treatment
- short-lasting inflammation of the oesophagus in 6% of patients
- short-lasting fever in about 2% of patients
- 1 patient developed a hole in the oesophagus 6 weeks after the procedure
- 1 patient developed chest pain 8 days after the procedure and needed to stay in hospital overnight
- 1 patient on an anti-blood clotting drug for heart disease developed bleeding in the digestive tract, which needed treating.

NICE was also told about some other possible risks: difficulty swallowing and tears in the oesophagus.

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

Endoscope

A thin flexible tube with a camera on the end.

Endoscopist

A doctor who specialises in using an endoscope.

Oesophagus

The tube from the mouth to the stomach down which food passes.

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

