Issue date January 2007

Understanding NICE guidance

Information for people who use NHS services

National Institute for Health and Clinical Excellence

Treating the symptoms of advanced oesophageal cancer with photodynamic therapy

NICE 'interventional procedures guidance' advises the NHS on when and how new surgical procedures or procedures that use electromagnetic radiation (such as X-rays, lasers and gamma rays) can be used.

This leaflet is about when and how photodynamic therapy (often abbreviated to PDT) can be used to treat the symptoms of advanced oesophageal cancer 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 oesophageal cancer or the procedure in detail – a member of your healthcare team should also give you full information and advice about these. The leaflet includes some questions you may want to ask your doctor to help you reach a decision. Some sources of further information and support are on page 6.

Interventional procedures 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 to treat the symptoms of advanced oesophageal cancer, 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.

The procedure should only be done in specialist centres by experienced surgeons.

Other comments from NICE

The studies available only compared photodynamic therapy with laser treatment. In addition, the studies did not say whether patients should have PDT again if they have already had it in the early stages of oesophageal cancer.

This procedure may not be the only possible treatment for the symptoms of advanced oesophageal cancer. Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.

Photodynamic therapy

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

The oesophagus is the tube which connects your mouth to your stomach. Cancer of the oesophagus can make swallowing difficult, and cause weight loss, hoarseness, coughing and pain. If the cancer has grown into the wall of the oesophagus or spread to other parts of the body, it is described as advanced.

Photodynamic therapy may be used to treat the symptoms of advanced oesophageal cancer and help patients swallow more easily. It is not a cure.

For PDT, the patient is sedated. A drug called a photosensitising agent is injected into the tumour. Special light is then shone at the tumour, usually using a low-power laser in an endoscope (a thin flexible tube that the patient swallows down into the oesophagus). The light causes the photosensitising agent to destroy the tumour cells. The procedure can be done on an outpatient basis and the patient usually does not need to stay in hospital overnight.

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

You might decide to have this procedure, to have a different procedure, or not to have a procedure at all.

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 five studies on this procedure.

How well does the procedure work?

In a study comparing PDT and laser treatment, the size of the tumour reduced in 32% of patients treated with PDT, compared with 20% of patients given laser treatment. The cancer in the oesophagus could no longer be seen in 9 out of 110 PDT patients and 2 out of 108 laser patients. In several small studies, the cancer in the oesophagus could no longer be seen in 0–7% of PDT patients.

There was no difference in a patient's ability to swallow after having PDT compared with patients who had laser treatment. To measure this, patients were asked to score how difficult it was to swallow, with 1 being easiest and 4 being the most difficult. The swallowing score decreased from 3 before treatment to 2 after treatment in one study and from 4 to 2.8 in another study. Another study showed that the diameter of the oesophagus at its narrowest part increased from 6.2 mm to 11.1 mm following PDT treatment.

In four of the studies that NICE looked at, patients lived for between 4.8 and 13.9 months after the PDT. Patients with less advanced cancer generally lived longer.

The expert advisers could not agree on whether PDT works, how safe it is and whether it is commonly carried out.

Risks and possible problems

In one study of 318 PDT procedures, 19 patients developed sensitivity to sunlight. Out of 215 patients treated with PDT, one patient developed sunburn. In a second study of 128 patients, no patients reported a reaction to sunlight.

When trying to remove or shrink a tumour, it is possible that a small hole will be made in the oesophagus (perforation). This happened less often with PDT (1% of patients) than with laser treatment (7% of patients) in one study; it happened in 2% of patients in another study.

Another problem is that the oesophagus may become narrower. This occurred in 2–7% of patients, some of whom needed another procedure to open up the oesophagus. There is also a risk of damage to the airways.

The expert advisers stated that other risks include nausea, skin rashes, pain, fever, breathing difficulty, abscess at the treatment site and worsening of symptoms relating to the oesophagus.

More information about oesophageal cancer

NHS Direct online (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.

About NICE

NICE produces guidance (advice) for the NHS about preventing, diagnosing and treating different medical conditions. The guidance is written by independent experts including healthcare professionals and people representing patients and carers. They consider how well an interventional procedure works and how safe it is, and ask the opinions of expert advisers. Staff working in the NHS are expected to follow this guidance.

To find out more about NICE, its work and how it reaches decisions, see www.nice.org.uk/aboutguidance

This leaflet and the full guidance aimed at healthcare professionals are available at www.nice.org.uk/IPG206

You can order printed copies of this leaflet from the NHS Response Line (phone 0870 1555 455 and quote reference N1196).

National Institute for Health and Clinical Excellence
MidCity Place, 71 High Holborn, London, WC1V 6NA; www.nice.org.uk
ISBN 1-84629-360-X
N1196 1P Jan 07

ISBN: 978-1-4731-9177-8