

## **Treating pancreatic necrosis by removing dead tissue using an endoscope inserted through a cut in the back**

*NICE 'HealthTech  
guidance' advises  
the NHS on when  
and how new  
procedures can be  
used in clinical  
practice.*

This leaflet is about when and how removing dead tissue using an endoscope inserted through a cut in the back can be used in the NHS to treat people with pancreatic necrosis. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence).

This HealthTech guidance makes recommendations on the safety of a procedure and how well it works. An interventional procedure is a test, treatment or surgery that involves a cut or puncture of the skin, or an endoscope to look inside the body, or energy sources such as X-rays, heat or ultrasound. 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.

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 pancreatic necrosis 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.

### What has NICE said?

This procedure can be offered routinely as a treatment option for people with pancreatic necrosis 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 by a healthcare team who are experienced in the management of complex disease of the pancreas.

*This procedure may not be the only possible treatment for pancreatic necrosis.*

*Your healthcare team should talk to you about whether it is suitable for you and about any other treatment options available.*

### Treating pancreatic necrosis by removing dead tissue using an endoscope inserted through a cut in the back

The medical name for this procedure is 'percutaneous retroperitoneal endoscopic necrosectomy'.

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

The pancreas produces juices containing enzymes which help to digest food. Sometimes these enzymes can attack the pancreas itself, for example if the tube carrying the juices to the gut is blocked. This can cause swelling and severe pain (acute pancreatitis), which in some patients may lead to a serious complication called necrosis where part of the pancreas tissue dies.

The usual treatment is to remove the dead pancreas tissue by open surgery, but the dead tissue may also be washed out through a drain inserted into the pancreas.

In this procedure, under a general anaesthetic a thin telescope (an endoscope) and special instruments are inserted through a small cut in the patient's back below the ribs to examine, wash out and remove the dead pancreas tissue. Drains may be placed for further washing out after the procedure, and the procedure may be repeated if needed.

### **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 removing dead pancreas tissue using an endoscope inserted through a cut in the back 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?

*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 5 studies on this procedure.

### **How well does the procedure work?**

In a study of 88 patients, 43 had a procedure to wash out and drain dead tissue away from the pancreas followed if necessary by the endoscopic procedure, and 45 had open surgery only. Of the 43 patients in the first group (where 26 had the procedure, 15 had drainage alone, and 2 were too unstable for the procedure) 8 patients died, compared with 7 deaths in the group of 45 who had open surgery (during a period of up to 6 months after discharge from hospital).

In 2 studies of a total of 219 patients, 27 out of 152 patients who had the endoscopic procedure died, compared with 26 out of 67 patients who had open surgery.

In a study of 30 patients, multiple organ failure occurred in 2 out of 15 patients after the endoscopic procedure and in 10 out of 15 patients after open surgery.

In the study of 88 patients, 17 out of 43 patients either had a major complication or died after endoscopic surgery, compared with 31 out of 45 patients following open surgery (during a period of up to 3 months after discharge from hospital).

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that the success of the procedure should be measured by a reduction in deaths and poor health, a reduced need for critical care after surgery, the number of procedures needing to be performed, and the length of stay in hospital.

## **Risks and possible problems**

Unintended tissue damage occurred in 14 out of 43 patients who had the endoscopic procedure and in 10 out of 45 patients who had open surgery, in the study of 88 patients.

In the study of 30 patients, of the 15 patients who had endoscopic surgery, 1 had a torn bowel and 2 developed a leak from the pancreas. In the other 15 patients who had open surgery, a torn bowel was reported in 2 patients but no leaks occurred.

In the study of 88 patients, bleeding that needed further treatment occurred in 7 out of 43 patients treated by the endoscopic procedure and in 10 out of 45 patients who had open surgery.

As well as looking at these studies, NICE also asked expert advisers for their views. These advisers are clinical specialists in this field of medicine. The advisers said that possible problems included not fully draining the area around the pancreas, serious infection (sepsis), injuring the kidney or spleen, death of bowel tissue, fluid collecting in the pancreas, blood clots and death.

### More information about pancreatic necrosis

NHS Choices ([www.nhs.uk](http://www.nhs.uk)) may be a good place to find out more. Your local patient advice and liaison service (usually known as PALS) may also be able to give you further information 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. This guidance applies to the whole of the NHS in England, Wales, Scotland and Northern Ireland. 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](http://www.nice.org.uk/aboutguidance)*

*This leaflet is about 'percutaneous retroperitoneal endoscopic necrosectomy'. This leaflet and the full guidance aimed at healthcare professionals are available at [www.nice.org.uk/guidance/HTG255](http://www.nice.org.uk/guidance/HTG255)*

*You can order printed copies of this leaflet from NICE publications (phone 0845 003 7783 or email [publications@nice.org.uk](mailto:publications@nice.org.uk) and quote reference N2478). The NICE website has a screen reader service called Browsealoud, which allows you to listen to our guidance. Click on the Browsealoud logo on the NICE website to use this service.*

*We encourage voluntary organisations, NHS organisations and clinicians to use text from this booklet in their own information about this procedure.*

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