

## **Treating haemorrhoids (piles) by tying off their blood supply**

*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 treating haemorrhoids (piles) by tying off their blood supply can be used in the NHS. 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.

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 haemorrhoids 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 7.

### What has NICE said?

There is evidence that this procedure is effective in the short and medium term and raises no major safety concerns. So this procedure can be offered routinely as an alternative to surgical removal or stapling of haemorrhoids, 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.

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

### Treating haemorrhoids (piles) by tying off their blood supply

The medical name for this procedure is 'haemorrhoidal artery ligation'.

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

Haemorrhoids are enlarged and swollen blood vessels in or around the lower rectum and the anus. Treatment depends on how bad they are. Their severity and size are classified into grades 1 to 4. Grade 1 or 2 haemorrhoids may be treated by dietary changes and medicines such as creams and suppositories. If these do not help, other treatments include tying the haemorrhoids using a rubber band and special (sclerosant) injections into the haemorrhoid. Treatments for grade 3 or 4 haemorrhoids which hang outside the anus include surgical removal, stapling or tying off their blood supply.

The aim of this procedure is to cut off the blood flow to the haemorrhoids to reduce discomfort, bleeding and their size. This

procedure is usually done with the patient under a general anaesthetic. The patient may be asked to have an enema beforehand. A proctoscope (a thin telescope inserted into the anus) is used to guide the surgeon. A special probe (Doppler) may be used to identify all the arteries supplying the haemorrhoids. The arterial blood vessels are stitched to cut off the flow of blood to the haemorrhoids. If the haemorrhoids are large, the surgeon may also fold the outer layer of the haemorrhoid and stitch it into position further up the anal passage.

### **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 it 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 9 studies on this procedure.

### How well does the procedure work?

An analysis of 6 studies that checked patients treated with this procedure after 1 year or longer reported symptoms that recurred after the procedure: 49 out of 507 patients still had bleeding, 18 out of 206 still had pain on passing a stool and 46 out of 427 still had protruding haemorrhoids. In an analysis of 9 studies in which patients were checked after less than 1 year, 40 out of 638 patients still had bleeding and 50 out of 638 still had protruding haemorrhoids. Across the studies, the percentage of patients with bleeding before the procedure ranged from 45% to 100%, the proportion with pain ranged from 12% to 83% and the proportion with protruding haemorrhoids ranged from 12% to 100%.

In another study, 18 out of 23 patients who were treated with the procedure and 15 out of 18 who were treated by stapling were symptom free when they were checked at 6 weeks.

Bleeding, protruding haemorrhoids and pain on passing stools had cleared up in between 96% and 98% of patients in a study of 616 when they were checked 4 weeks after having the procedure. When 523 of these patients were checked again after 1 year, their average satisfaction score was 8 out of 10 (10 being most satisfied). Bleeding had resolved in 132 out of 142 patients in another study and haemorrhoids no longer protruded in 110 out of 119 patients when they were checked 46 months after having the procedure.

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 success factors are less pain after the

procedure than other treatments, the haemorrhoids going away, and relief of symptoms such as bleeding, protruding haemorrhoids, swelling, pain, soreness and itching.

### **Risks and possible problems**

Bleeding after the procedure was a problem in 3 patients out of 1996 in an analysis of 17 studies. In the study of 616 patients, 4 had to go back to hospital because of bleeding. In a study of 330 patients, 4 had bleeding immediately after the procedure, 3 had bleeding some time after and 4 developed blood-filled swellings (haematoma).

In 3 studies involving a total of 937 patients, clots of coagulated blood causing pain were reported in 26 patients. Three of these patients needed further surgery. An abnormal passageway (fistula) had formed in the anus of 1 patient in the study of 507 when their progress was checked after 1 year. In the 3 studies of 937 patients, 18 patients developed a tear (fissure) inside their anus after the procedure.

A study of 41 patients measured pain after the procedure (a higher score meaning more pain). When they were checked after 7 days, patients treated with the procedure had a score of 1.6 while patients treated by stapling had a score of 3.2. At 21 days, these scores were 0.2 and 1.0.

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 include infection, a tear in the rectum, an abscess in the pelvis, narrowing of the anal canal, pain in the short and long term, and bowel control problems leading to incontinence.

### More information about haemorrhoids

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. For details of all NICE guidance on haemorrhoids, visit our website at [www.nice.org.uk](http://www.nice.org.uk)

## 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. Interventional procedures 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 ‘haemorrhoidal artery ligation’. This leaflet and the full guidance aimed at healthcare professionals are available at [www.nice.org.uk/guidance/HTG218](http://www.nice.org.uk/guidance/HTG218)*

*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 N2156). 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.*

**National Institute for Health and Clinical Excellence**

MidCity Place, 71 High Holborn, London, WC1V 6NA; [www.nice.org.uk](http://www.nice.org.uk)

**Information about NICE HealthTech guidance 218**



ISBN 978-1-4731-8144-1

N2156 1P 12 May 10

© National Institute for Health and Clinical Excellence, 2010. All rights reserved. This material may be freely reproduced for educational and not-for-profit purposes. No reproduction by or for commercial organisations, or for commercial purposes, is allowed without the express written permission of NICE.