Leicester Bowel Clinic

Anal fistula and abscess

Introduction

An anal fistula is a small channel that develops between the end of the bowel, known as the anal canal, and the skin near the anus. The end of the fistula can appear as a hole in the skin around the anus (back passage).

What causes an anal fistula?

An anal fistula usually develops after an anal abscess (a collection of pus) bursts, or when an abscess has not been completely treated. It can also be caused by conditions that affect the intestines, such as inflammatory bowel disease (IBD) mainly Crohn's disease.

Other less common or rare causes of an anal fistula include cancer of the rectum (lower bowel) and anus (back passage), tuberculosis, HIV and AIDS, sexually transmitted infections that often causes no symptoms

Research shows that smoking increases the risk of an anal abscess or fistula. Stopping smoking will reduce this risk. After 5 to 10 years of not smoking, your overall risk of an anal abscess or fistula will be back to normal.

Symptoms of an anal fistula

- skin irritation around the anus (back passage)
- throbbing, constant pain that may be worse when you sit down, move around, have a bowel movement
- discharge of pus or blood when you have a bowel movement
- If your fistula was caused by an abscess that you still have, you may have fever, tiredness and feel unwell due to the infection
- If your fistula was caused by Crohn's disease you may also have abdominal pain, diarrhoea, loss of appetite, weight loss, nausea (feeling sick), vomiting

Types of fistula

An anal fistula is usually classified as:

- simple or complex depending on whether there is a single fistula tract or interlinking connections

- low or high depending on its position and how close it is to the sphincter muscles

The sphincter muscles are two rings of muscles that open and close the anus. They are known as the internal and external sphincter muscles.

The most common types of anal fistula are:

- intersphincteric fistula the fistula tract (channel) crosses the internal sphincter and opens on the surface of the skin next to the anus

- transsphincteric fistula the fistula tract passes through both the internal and external sphincters and opens on the surface of the skin next to the anus

Anal abscess

An abscess is a painful collection of pus. An anal abscess usually develops after a small gland just inside the anus becomes infected with bacteria. The cause of the abscess is often unknown.

Abscesses are usually treated with a course of antibiotics. You may also need to have the infected fluid drained away from the abscess. If an anal abscess bursts before it has been treated, it can sometimes cause an anal fistula to develop. A fistula may also occur if an abscess has not completely healed, or if the infected fluid has not been entirely drained away.

Approximately 30-50% of people with an anal abscess will develop an anal fistula. Around 80% of all anal fistulas develop from an infection in the anus.

Investigations

1. Rectal examination which is an examination of your back passage. A fistula usually appears as a red, inflamed (swollen) spot, which often oozes pus. If the opening of the fistula is found, it might be possible to work out where the path of the fistula. This also involves inserting a gloved finger inside the back passage to feel for the internal opening and fistula path and to assess the back passage muscles.

2. Proctoscopy is an examination of your lower back passage with a short plastic telescope that is inserted inside the back passage.

3. Examination under general anaesthetic (EUA) might be necessary if you are in considerable pain and cannot tolerate a rectal examination. The surgeon can also probe the fistula paths and make a better assessment.

4. MRI (magnetic resonance imaging) scan uses strong magnetic fields and radio waves to produce a detailed image of the inside of your body, and is often used in cases of complex or recurring fistulae
5. Anal endosonography (ultrasound) this test uses high-frequency sound waves to create an image of the inside of your body, and is an accurate and frequently used way of locating the internal opening of a fistula. It is not commonly used as MRI is a good and less invasive test.

Treatment

The treatment of a fistula is surgery. The type of surgery you have will depend on the position of your fistula and whether it is classed as simple or complex. The aim of surgery is to heal the fistula while avoiding damage to the sphincter muscles (the ring of muscles that open and close the anus). Damage to the sphincter muscles could lead to bowel incontinence, where you do not have control over your bowels.

Some of the different types of anal fistula surgery are explained below:

1. Fistulotomy is the most commonly used type of anal fistula surgery, used in 85-95% of cases. It involves cutting open the whole length of the fistula, from the internal opening to the external opening. After one to two months, the fistula will heal into a flat scar. However, this method often involves cutting a small part of your sphincter (back passage muscles) and can cause mild incontinence (loss of control from weakening of the back passage muscle).

2. Seton techniques are when a piece of plastic or silk thread is left in the fistula tract to keep the tract open, often for a few weeks or months. This allows it to drain properly before it heals. This may be considered if you are at high risk of developing incontinence for example, because your fistula crosses your sphincter muscles. It is also sometimes used to allow secondary tracts to heal before further surgery is carried out on the main tract. Sometimes it can also be used to divide the sphincter muscle, which allows it to heal between operations.

3. Advancement flap procedures may be considered if your fistula is complex or there is a high risk of incontinence. It involves removal of part of your fistula

tract and covering the internal opening of the fistula with a piece of tissue from the rectum or from the skin around the anus.

4. Bioprosthetic plugs are commonly made of collagen (obtained from animal tissue). It is a cone-shaped plug used to block the internal opening of the fistula. It is a simple and safe technique with reported success rates of more than 80% but there is still uncertainty over the recurrence rates and long-term outcomes. The collagen plug is not without complications, such as:

    - pain and infection requiring treatment with antibiotics
    - a new abscess forming
    - the plug being pushed out of place

5. Fibrin glue is currently the only non-surgical option for treating an anal fistula. The fibrin glue is injected into the fistula to seal the tract. It is injected through the opening of the fistula and the opening is then stitched closed. Fibrin glue may seem an attractive option as it is a simple, safe and painless procedure. However, the long-term results for this treatment method are poor.

Postoperative advice after surgery

After having surgery to remove an anal fistula, you should be able to move around and eat and drink after recovering from the anaesthetic. Most operations are done as day case which means that you may be able to go home on the same day as the surgery.

After the operation you will need to wear a dressing or pad over the wound until it has healed. Most wounds take around 4-6 weeks to heal. There may be some bleeding or a discharge from the wound for the first few weeks.

Complications of an anal fistula

Complications may occur from an anal fistula or as a result of fistula surgery. They include the following:

- Infection of the area around the fistula or operation wound. Any type of surgery carries a risk of infection. If this happens, you may require a course of antibiotics.

- Incontinence is rare but can occur from surgery due to damage to anal sphincter muscles. This can result in loss of some control of your bowels, leading to faeces leaking from your back passage. It is generally mild and mainly inability to hold wind or very loose stools. This is also known as faecal or bowel incontinence. The likelihood of incontinence occurring after surgery will depend on the type of surgery you had and the position of your fistula. If you had some bowel incontinence before surgery, this may get worse.

- Recurrence of the anal fistula after surgery depends on the cause of the fistula and its position.

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