

### What is a Fissure?

A fissure is a small split or tear in the lower third of the anal canal. This split fails to heal and becomes established as a painful ulcer associated with spasm of the anal sphincter muscle.

### Cause

Most anal fissures arise following trauma (injury), to the anus. The commonest trauma is that occasioned by the passage of a hard, constipated stool. However, anal fissures can occur following bouts of diarrhoea, childbirth etc.

An anal fissure is a simple mechanical problem and does not turn to cancer.

### Symptoms

Pain is the major symptom of anal fissure. It comes on at the time of defaecation and lasts for a variable period afterwards. Pain is due to tenderness of the fissure itself and to intense spasm of the internal anal sphincter muscle. Bleeding is a common symptom, especially when the fissure first develops. Sometimes a swollen skin tag or lump develops at the external end of the fissure.

### Medical Treatment

Most acute superficial fissures heal spontaneously, and even deep chronic fissures can heal with conservative measures. Management includes ensuring soft stools by maintaining a high dietary fibre and fluid intake and careful anal hygiene to keep the fissure clean. Frequent warm baths and topical application of muscle relaxing ointments (0.2% GTN or 2% diltiazem) help relax the anal sphincter muscle to reduce pain and help the fissure heal. The fissure may recur months or years later.

### Surgical Treatment

The surgical treatment of an anal fissure can usually be performed as a day procedure with minimal hospital stay. A sphincterotomy is the "gold standard" of treatment, however an injection of Botox® into the anal muscle is an alternative treatment offered by some surgeons. Botox® injection causes temporary relaxation of the sphincter and lasts 8-12 weeks giving time for the fissure to heal. Botox® preserves sphincter integrity but its clinical effectiveness continues to be evaluated. A sphincterotomy involves a small cut near the anal

opening, with the division of the lowest part of the internal anal sphincter muscle. The spasm is relieved, which helps the fissure to heal. Sometimes the fissure itself may be excised, together with any nearby haemorrhoids and any large or troublesome skin tags.

### Results

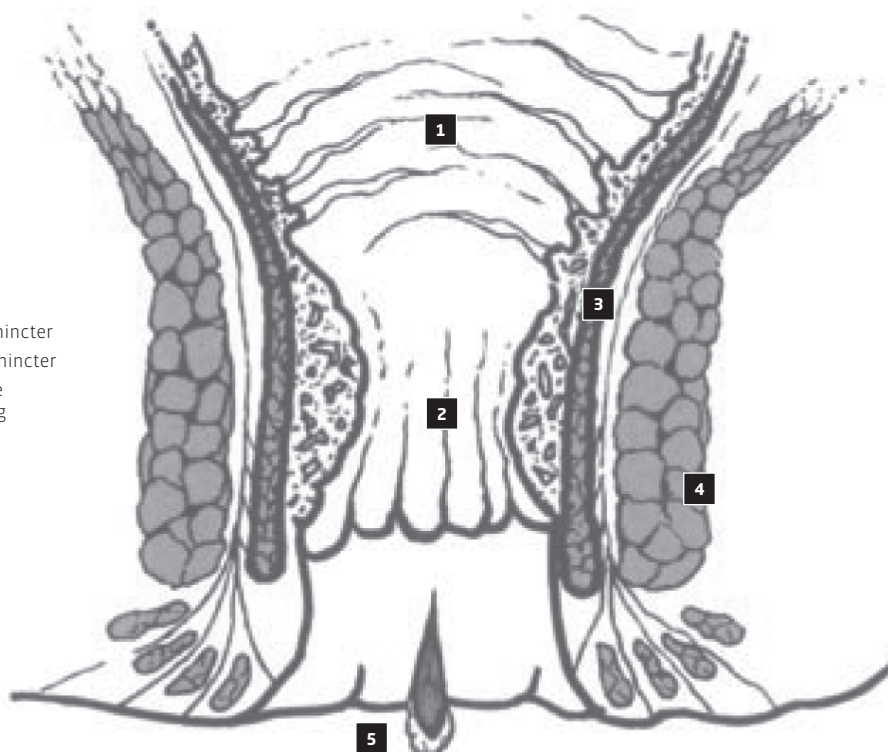
Prompt relief from the pain is to be expected, even though healing of the fissure may take some weeks. Healing of the fissure is to be expected in 60-65% of those who have Botox® injection and 95% of those with sphincterotomy. Those with persisting symptoms may need a further procedure (Botox® injection or sphincterotomy). Otherwise persisting haemorrhoids may need attention, or the fissure may be excised and covered by an advancement flap from nearby skin.

### Complications of Surgery

These are very uncommon as the operation is relatively minor and safe. Rarely there may be post operative bleeding or infection of the sphincterotomy wound. In approximately 5% of patients the healing of the wounds may be delayed.

### Anal Sphincter Function After Surgery

Both sphincterotomy and Botox® injection may occasionally result in some impairment of the control of "wind" in the rectum. With Botox® injection this resolves within 3 months but following sphincterotomy this may be longer lasting. Incontinence of faeces (loss of control of bowel movement) is a very rare complication.



1. Rectum
2. Anal Canal
3. Internal Sphincter
4. External Sphincter
5. Anal Fissure and Skin Tag

### Colorectal Surgical Society of Australia and New Zealand (CSSANZ)

Members of the Society are surgical specialists practising exclusively in colorectal surgery - the management of diseases of the large bowel (colon), rectum, anus and small bowel. After completing general surgery training they have completed a further period of training and research in colorectal surgery. The Society's mission is the maintenance of high standards in colorectal surgery and colonoscopy in Australia and New Zealand through the training of colorectal surgeons and the education of its members, and to promote awareness, prevention and early detection of colorectal diseases in the community.

The CSSANZ Foundation is a trust with a board of governors whose objective is to support high quality research projects for colorectal surgeons in training and our members. Donations to the CSSANZ Foundation are fully tax deductible in Australia and can be sent to:

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