How to deal with a thrombosed external haemorrhoid

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Thrombosed external haemorrhoids are a common and painful acute perianal condition. Management options include conservative treatment, an office procedure or referral for surgery.

Thrombosed external haemorrhoids are actually perianal thromboses within perianal subcutaneous veins (external haemorrhoidal plexus), and may occur with or without rupture of the veins. They occur in younger patients, often in their thirties, and are caused by straining, often in association with hard faeces, and less often with diarrhoea. They also occur late in pregnancy (8%) and postpartum (20%), and are seen (though rarely) after rubber band ligation of internal haemorrhoids or stapled haemorrhoidectomy.[1]

Management is determined by how long the haemorrhoid has been present, how much pain it is causing the patient, the size and complexity of the lesion, the presence of any other associated features, and the pattern of the patient's normal bowel habits. Following initial assessment, the decision can be made to treat conservatively, to perform office incision and drainage of a simple thrombosis, or to refer for surgical opinion and management, including excision and primary closure.[2]

Assessment

How long is the history?

Commonly, the acutely painful perianal lump will be noted by patients after having strained while opening their bowels. They are usually most painful within the first 72 hours, and often have begun to feel less painful after five days. Office incision and drainage, when it is appropriate, is most likely to provide relief if initiated within the first 72 hours, and the patient is not on any anticoagulants.[3]

The pain of a perianal thrombosis is usually persistent. Occasionally the pain is not severe, and the less pain the patient is in, the more the risks and pain of incision and drainage outweigh the benefits.

How large and complex is the lesion?

If the perianal thrombosis is approximately 5 mm or less in diameter, it is usually not very painful, or at least not painful enough to require incision and drainage. If the lesion is approximately 1 cm in diameter, round, ovoid and simple (Figure 1a), and tense to palpation, office incision and drainage will usually remove entirely the one or two thrombi within the lesion and give great relief of pain (Figure 1b).

If the lesion is 2 cm or more in diameter, it is usually complex with multiple loculated thrombi. These lesions are not suitable for office incision and drainage because of the complexity or the pain of the procedure, or persistent bleeding or recurrence (Figure 2a). A thrombosis superficial to the perianal skin will have a more bluish or purplish hue and will be easier to drain than a thrombosis situated deeper to the perianal skin. The thrombus may sometimes ulcerate through the skin and evacuate spontaneously.

Are there any other associated features?

If the patient does not have a recent and acute history, and there is not the characteristic bluish or purplish hue to the perianal lesion, suspect other diagnoses.

Perianal pain of recent origin, commonly associated with rectal bleeding on the toilet paper or in the bowl, is more likely to be due to an acute anal fissure. Acute anal fissure, characterised by pain and bleeding, is a much more common presentation to the office then perianal thrombosis, characterised by pain and a lump. A chronic anal fissure may, however, have a tender sentinel anal tag associated with it. Patients with perianal thrombosis may also present with rectal bleeding, but this is not from the thrombosis itself but usually from associated internal haemorrhoids.

A perianal abscess, while being tender and swollen, is usually red and hot with surrounding inflammation, and may have commenced discharging pus.

Perianal thrombosis can occur in conjunction with a low rectal cancer, which has caused recent straining.

If the patient has a history of Crohn's disease, an acute perianal swelling may be an oedematous and painful skin tag, possibly associated with perianal sepsis, and/or anal fissure.

What are the patient's usual bowel habits?

Although often of no benefit in the acute management of a painful lump, correcting problems in the patient's bowel habits is often a key element in the management of these patients, especially for preventing recurrence.

If the patient has had recent surgery for other causes and is taking analgesics, short-term use of laxatives and stool softeners while he or she remains on analgesics may be required. Water intake of six to eight glasses per day (1.5 to 2.0 L), and adequate fibre intake are essential. If the patient's fibre intake

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Office incision and drainage of thrombosed external haemorrhoids

Office incision and drainage is the least common management strategy of thrombosed external haemorrhoids. However, if the lesion is approximately 1 cm in diameter, round, ovoid and simple and tense to palpation, office incision and drainage will usually remove entirely the one or two thrombi within the lesion and give great relief of pain to the patient.

This procedure is most likely to give relief if performed within 72 hours of symptom onset, and if the patient is not taking an anticoagulant.

Preparation

Obtain the patient's consent (verbal or written) for the procedure after explaining the risks (pain, bleeding, incomplete evacuation of thrombi, recurrence, infection), benefits (relief of pain and swelling, avoidance of an anal skin tag after swelling has reduced) and alternatives.

The patient needs to be calm and reassured, and placed in the left lateral position. The skin should be cleaned with antiseptic (this step is not used by some) and local anaesthetic instilled subcutaneously. There is no need to mark the site of incision.

Table. Equipment for incision and drainage

- Dressing pack
- Topical antiseptic agent: chlorhexidine or povidone/iodine solution
- Sterile disposable gloves
- Disposable size 15 scalpel blade with handle
- One 5 mL syringe and one 25 gauge needle
- 5 mL ampoule of 1.0% lignocaine with adrenaline 1:100,000
- Sterile iris scissors may be helpful if available
- Dressing: cotton gauze 5 x 5 cm and tape
- Adequate lighting

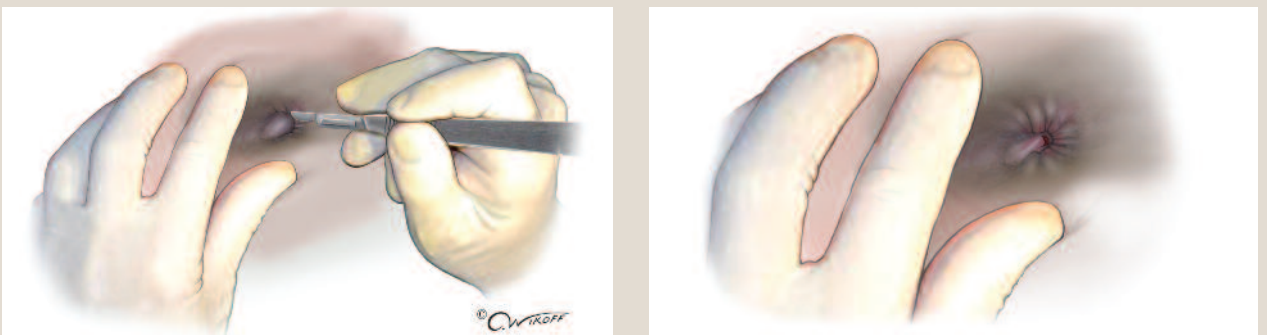
The procedure

Step 1. Set out the equipment.

Step 2. Infiltrate the area with local anaesthetic. To do this, first stabilise the skin surrounding the lesion with fingertip pressure of the nondominant thumb and index finger. After skin penetration with the needle, instil only 1 to 2 mL slowly over 20 to 30 seconds. This can cause as much or more pain as the tension of the thrombosis, so the smallest volume that achieves anaesthesia of the skin should be used.

Step 3. After about 30 seconds, make a small incision of about 4 to 7 mm in length in a radial fashion over the thrombosis, and deepen it until the thrombi are visible (Figure 1a). If the clot does not come out immediately (Figure 1b), it may be pulled out with forceps, manipulated gently out between index finger and thumb, or the iris scissors may be used to separate fibrous tissue preventing complete thrombi evacuation. If this last step is required, the procedure is usually more painful and less successful.

Step 4. Apply pressure to the area with a gauze square and the flat of the hand after evacuation of thrombi, until there is no bleeding. Suture of small perianal incisions appears to be more painful and more likely to result in recurrent haematoma and swelling than does an open wound left to heal by secondary intention. Perianal wounds commonly heal excellently from a cosmetic point of view, whether left open or closed.



Figures 1a and b. Simple perianal thrombosis suitable for office incision and drainage. This patient presented two days after commencement of symptoms. a (left). Incision of the lesion. Note the typical bluish hue and tense perianal skin. b (right). Evacuated thrombosis immediately after skin incision.

cannot be increased through diet, psyllium, sterculia, ispaghula or methylcellulose, depending on patient preference, can be recommended. Patients who strain excessively or sit on the toilet for long periods should be advised to modify their defaecation habits.

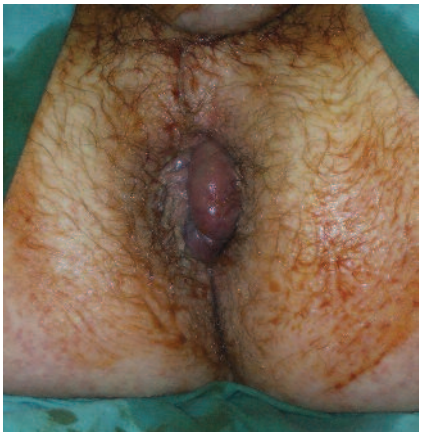
Management

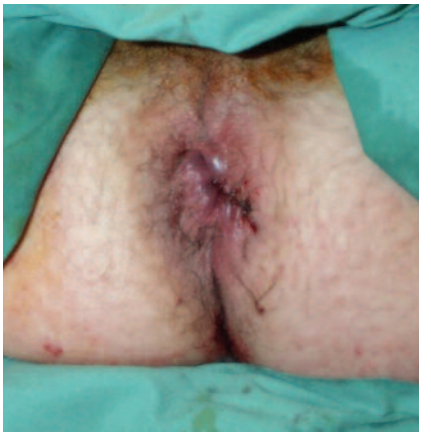
Nonoperative treatment

Nonoperative treatment will be the best approach in most cases. It is appropriate if the pain has already improved since the symptoms commenced, or if the lesion is too small or large for an office procedure, or if the patient prefers it.

Treatment is primarily symptomatic and expectant, combining:

- topical local anaesthetics such as 1 or 2% lignocaine (Xylocaine)
- local counterirritants such as warm baths, or local ice packs if they can be





Figures 2a and b. Complex large 2 x 3 cm perianal thromboses which required excision and primary closure. a (left). At seven days after commencement of symptoms, when pain and swelling continued and oedema was present. b (right). The perianal wound after primary closure.

tolerated (these may also reduce swelling)
- oral analgesics, even though they can be temporarily constipating
- bed rest if required
- focus on water and fibre intake.

The addition of 0.3% nifedipine to topical lignocaine (not yet available in Australia) has been shown to have improved symptom and swelling resolution.[4] Similarly, the use of 0.2% glyceryl trinitrate ointment (Rectogesic), which relaxes the internal anal sphincter, has been used in nonoperative management.

The patient should be reviewed after one week or earlier.

Office incision and drainage

Office incision and drainage is the least common treatment method for thrombosed external haemorrhoids, but it can be the most suitable approach for medium sized, simple cases. The procedure is detailed in the box on page 71.

Operative treatment

Larger sized perianal thromboses, which are complex collections of multiple sep - tated thrombi and which remain painful and increase in size, will require excision and primary closure by a surgeon (see Figure 2b).

Precautions and complications

Digital rectal examination is often not suitable in the acute setting due to the pain it causes, although it is required subsequently.

Although it is possible and well described to evacuate a larger perianal thrombosis in the office, and suture the wound or excise the lesion, I am not in favour of this due to the pain and bleeding it may cause, and the requirement often of an assistant.[5] If incision and drainage of a larger perianal thrombosis is required, I prefer excision under general anaesthesia.

Follow up and after care

Resolution of pain and swelling will indicate that management has been successful. Incision and drainage of a small perianal thrombosis, while initially painful, should result in almost immediate relief of pain. Subsequently the wound should heal well and not even leave a skin tag.

Small perianal thromboses treated nonoperatively can cause symptoms for up to four weeks. They take six to 12 weeks to resolve, and often there is a palpable remnant present long after the patient has forgotten the pain he or she had, or noticed the residual small perianal lump.

Larger perianal thromboses can resolve nonoperatively, but more often they leave a residual perianal skin tag following resolution. Resolution takes 12 weeks, although usually it will be greatly improved at six weeks. If the patient is still in a great deal of pain and swelling at one week after commencement of the perianal thrombosis, operative intervention is usually required. However, this is uncommon.

Recurrence of thrombosed external haemorrhoids occur in up to 25% of patients. It recurs more often in those managed nonoperatively. Patients with a prior thrombosed external haemorrhoid are more likely to proceed to excision.[6]

Summary

Thrombosed external haemorrhoids are a common presentation in general practice. Most can be assessed and managed nonoperatively, or occasionally by simple incision and drainage, or excision by a surgeon. MT

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