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Anorectal pain, bleeding and lumps

Background

The patient presenting with anal pain, anal lump or rectal bleeding is a common occurrence in the general practice setting and the combination of symptoms usually gives an indication of the most likely diagnosis. However, careful examination including digital rectal examination is always required.

Objective

This article discusses three common anorectal conditions: perianal haematoma, haemorrhoids and anal fissure, and briefly discusses the less common, but not to be missed conditions: anal carcinoma and low rectal carcinoma.

Discussion

The majority of first degree haemorrhoids can be managed by conservative measures alone. More severe degree haemorrhoids require surgical intervention with sclerosant injection, rubber band ligation or surgical haemorrhoidectomy. Initial treatment for anal fissure is with a high fibre diet, faecal softeners, topical local anaesthetic gel and glycerol trinitrate ointment. Botulinum toxin can be injected to create a chemical sphincterotomy, allowing healing. Chronic fissures produce intense and constant pain in the anal region and in these cases surgical sphincterotomy is often necessary to cure the condition, but can result in faecal incontinence. Anal cancer has similar presentation to haemorrhoids and carcinoma of distal rectum can initially present with a haemorrhoid, so the possibility of anorectal cancer should be considered in any patient presenting with haemorrhoids, tenesmus and change in bowel habit.

Keywords: haemorrhoids; anus diseases; fissure in ano; anus neoplasms; colorectal neoplasms



Anorectal problems are frequent presentations in the general practice setting.¹ Symptoms tend to be a combination of one or more of pain, lumps, bleeding, discharge or itch. In this article we focus on pain, lumps and bleeding. (Perianal itch is discussed in the article by MacLean and Russell in this issue).

Anorectal symptoms tend to cause anxiety in the patient, often related to the fear of cancer.¹ The combination of symptoms usually gives an indication of the most likely diagnosis (*Table 1*). Common anorectal conditions are shown in *Figure 1*.

History

A careful history of the patient's bowel habits, with particular attention to the nature of bleeding during defecation is also important in the differential diagnosis.

- A change in bowel habit is a 'red flag' for colorectal carcinoma
- Blood mixed with faeces is associated with rectal polyps or carcinoma (also a 'red flag' symptom)
- Bright red blood on the paper or in the bowl is often associated with haemorrhoids.

Tenesmus (a feeling of incomplete emptying of the rectum) is commonly associated with irritable bowel syndrome, but may also indicate an abnormal mass in the rectum or anal canal.²

The presence of anal pain on defecation helps to distinguish uncomplicated haemorrhoids (painless) from fissures (painful), as both can produce bright red bleeding.

Examination

Examination involves inspection of the perianal area, which may reveal an obvious cause such as a perianal haematoma, prolapsing haemorrhoid, or anal fissure.

Even if a potential cause is found on inspection, the general practitioner should be prepared to don the gloves and perform an anal digital examination on every patient presenting with anorectal symptoms. Patients are often apprehensive about this procedure, but gentle insertion of a well lubricated index finger can obtain a great deal of information. Reassure the patient that the procedure will be terminated in the event of excessive pain. Provided the patient does not have marked anal spasm, it may be possible to perform a rectal examination, even in the presence of a painful condition such as an anal fissure.



Table 1. Likely diagnosis of anorectal pain

Pain alone	Pain and lump	Pain, lump and bleeding	Bleeding alone
<ul style="list-style-type: none"> • Anal fissure • Anal herpes • Ulcerative proctitis • Proctalgia fugax 	<ul style="list-style-type: none"> • Perianal haematoma • Strangulated internal haemorrhoid (fourth degree haemorrhoid) • Abscess (perianal or ischiorectal) • Pilonidal sinus 	<ul style="list-style-type: none"> • Second degree haemorrhoid (spontaneously reducing lump on straining) • Third degree haemorrhoid (lump prolapsing but reducible) • Fourth degree haemorrhoid • Ulcerated perianal haematoma (blood on underwear) 	<ul style="list-style-type: none"> • Internal haemorrhoids (bright red bleeding separate from faeces in toilet bowl or on toilet paper) • Colorectal polyps (blood mixed with faeces) • Colorectal carcinoma (blood mixed with faeces) • Anal carcinoma
Lump alone	Pain and bleeding	Lump and bleeding	
<ul style="list-style-type: none"> • Skin tags • Perianal warts • Anal carcinoma 	<ul style="list-style-type: none"> • Anal fissure • Proctitis 	<ul style="list-style-type: none"> • Second degree haemorrhoid (spontaneously reducing lump on straining) • Anal carcinoma (blood on underwear or toilet paper) 	

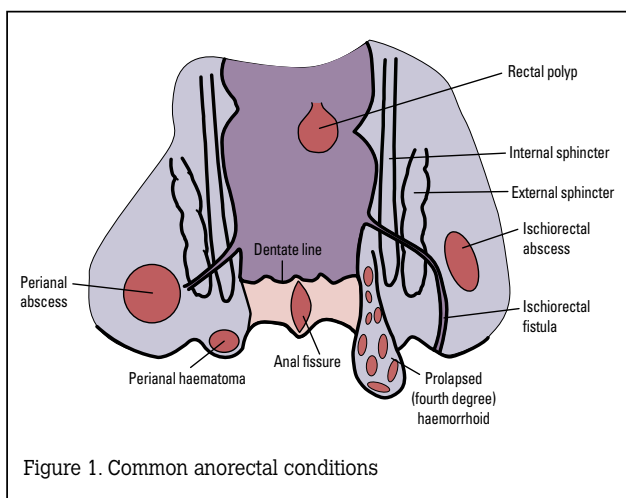


Figure 1. Common anorectal conditions

Instrumentation to visualise the anal and rectal mucosa

An understanding of the anatomy of the anorectal region is important (Figure 2). The anal canal is roughly 5 cm in length in an adult. This is less than the length of an adult index finger and so most anal pathologies can be detected on digital examination.

Examination of the anal canal with a disposable proctoscope (anoscope), an instrument 7 cm in length, can access the entire anal canal but can only reach the most distal part of the rectum.

To examine the rectum, which is 18 cm in length, requires either a rigid sigmoidoscope (also a misnomer), which is 25 cm in length or a flexible sigmoidoscope which is usually not available as an office procedure. Sigmoidoscopy may require a degree of preparation of the bowel by giving a disposable enema before the procedure if faecal loading precludes adequate vision. However, information about faeces in the rectum, such as blood streaking, will be lost after bowel preparation. The doctor performing the rigid sigmoidoscopy should be aware that the rectum is a curved

tube nesting in the hollow of the sacrum and a straight instrument can injure the anterior wall of the rectum unless the proceduralist visualise the lumen of the rectum throughout the procedure.

The remainder of this article discusses three common anorectal conditions: perianal haematoma, haemorrhoids and anal fissure; and briefly discusses the less common but not to be missed anal carcinoma and low rectal carcinoma.

Perianal haematoma (thrombosed external pile)

A perianal haematoma is a small subcutaneous haematoma (and not a true haemorrhoid), with a dark blue or almost black appearance, close to the anal verge. It results from a burst perianal vein. A perianal haematoma usually develops as an acute episode following a heavy effort such as lifting, or coughing or sneezing and presents as a painful lump. If the patient seeks treatment within a few hours of the onset of the symptoms, immediate relief can be achieved by infiltrating a small amount of local anaesthetic in the skin over the lump, followed by a small incision in the overlying skin. A recent blood clot is usually under pressure under thin skin and often ‘pops’ out of the wound with immediate relief of the symptoms.

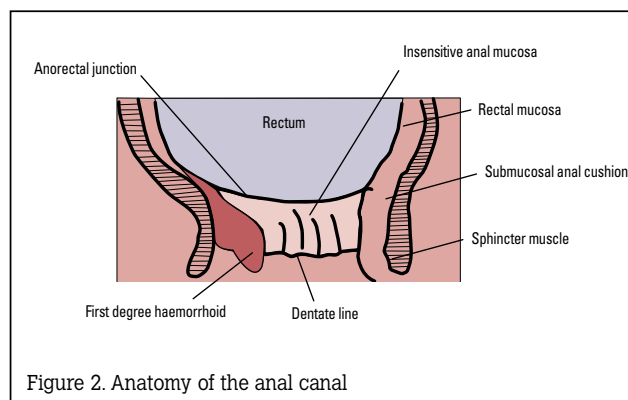


Figure 2. Anatomy of the anal canal

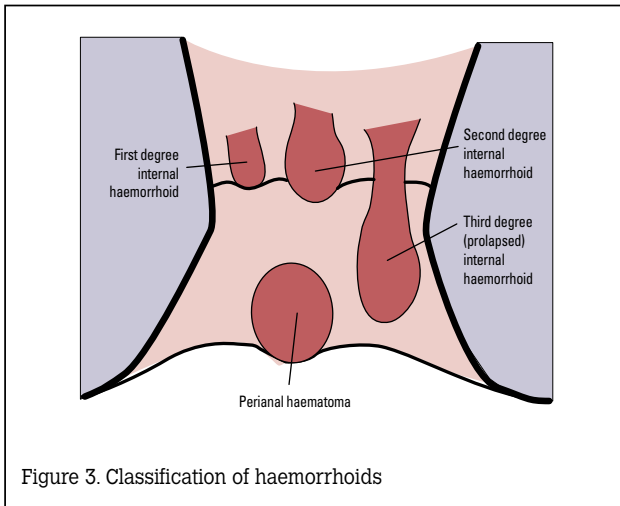


Figure 3. Classification of haemorrhoids

Haemorrhoids

Haemorrhoids are common and are due to enlargement of the normally occurring vascular cushion which is made up of arteriovenous connections located at the 3, 7, and 11 o'clock position in the submucosal layer in the proximal part of anal canal. With progressive enlargement these descend downward during straining and cause bleeding (*Figure 3*).

First degree haemorrhoids bleed during defecation but do not prolapse. A small amount of bright red blood during defecation is commonly seen but pain is not the main feature.

Second degree haemorrhoids bleed during defecation and prolapse but reduce spontaneously after defecation.

Third degree haemorrhoids prolapse and may be painful if they are large. They have to be manually reduced.

Fourth degree haemorrhoids are thrombosed internal piles and present as permanently prolapsed and irreducible. They are associated with mucous discharge and bleeding and are painful.

Management

Treatment of haemorrhoids depends on the degree of prolapse and the extent of symptoms (*Figure 4*).³ All patients require conservative treatment. Those with second degree haemorrhoids, or more severe haemorrhoids, require additional measures such as sclerosant injection, rubber band ligation or haemorrhoidectomy.

The majority of first degree haemorrhoids can be managed by conservative measures alone. Treatment includes correction of constipation if present, by increasing the fibre intake, mild laxatives and the avoidance of medications containing constipating drugs such as codeine. These measures are also important for patients with more severe haemorrhoids.

Sclerosant injection

Injection of haemorrhoids could be an office procedure, but prior training in the technique is required. Sclerosant is injected at the neck of the haemorrhoid in the proximal part of the anal canal, where the mucosa is relatively insensitive. Just enough sclerosant is

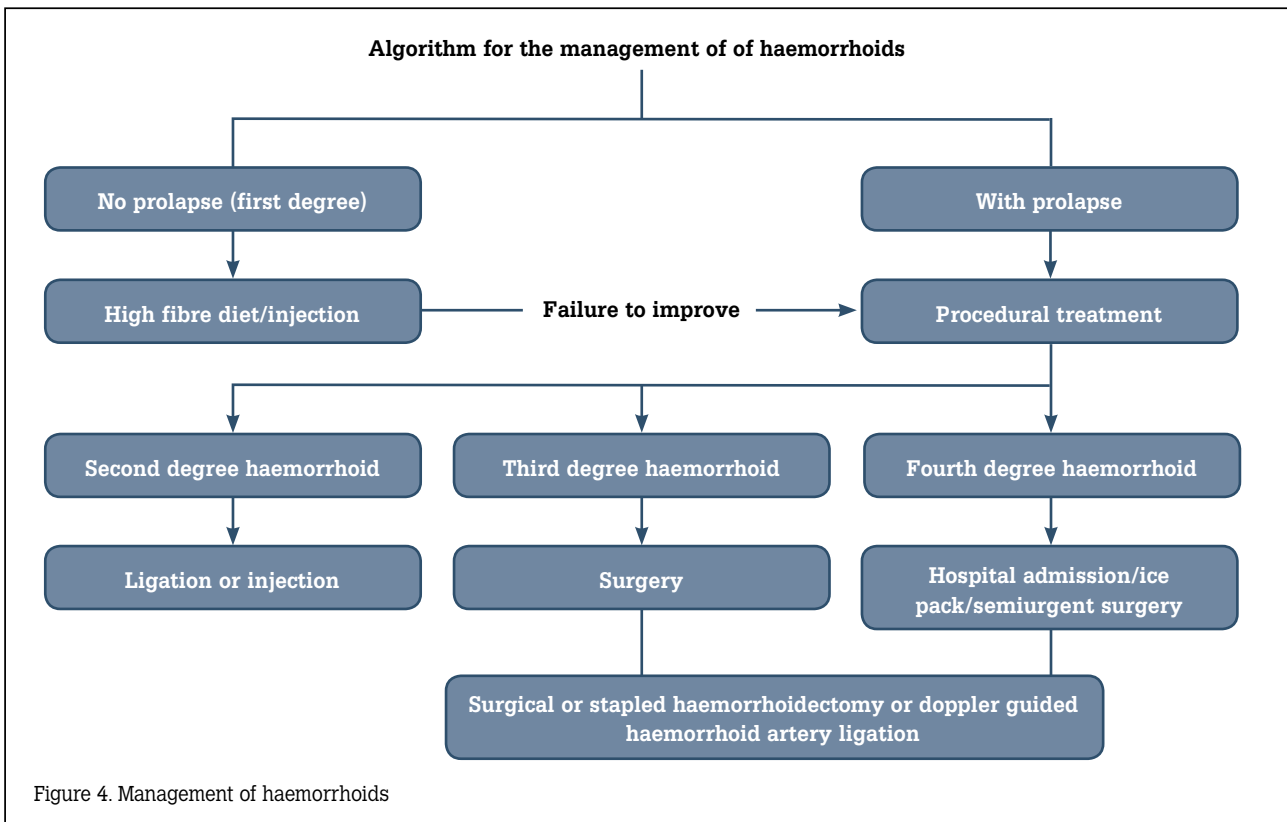


Figure 4. Management of haemorrhoids



Figure 5. Fourth degree haemorrhoids
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Figure 6. Anal fissure in posterior position of the anal verge
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injected to cause blanching of the mucosa. Sloughing of the mucosa at the site of injection and or prostatic hematoma and abscess are complications that can arise from faulty techniques.

Rubber band ligation

This is another potential office procedure. It is suitable for patients with second degree haemorrhoids, some third degree haemorrhoids and sometimes for first degree haemorrhoids not responding to conservative measures. A rubber band applicator with a single hand controlled suction device is necessary to apply the rubber band to the neck of the haemorrhoid, through the proctoscope. The correct placement of the band is critical for effective treatment and to avoid pain. Incorrectly applied rubber bands can cause much pain.

Surgical haemorrhoidectomy

Surgical haemorrhoidectomy is a hospital procedure required for some third and all fourth degree haemorrhoids, and those who have failed other treatments. Recently there has been some interest in stapled haemorrhoidectomy and Doppler guided haemorrhoidal artery ligation, which are claimed to reduce postoperative pain and reduce the length of stay in hospital. These are hospital procedures and necessitate referral to an appropriate specialist.

Patients with fourth degree haemorrhoids usually need urgent hospital admission. They require analgesia, perineal ice packs, and urgent haemorrhoidectomy due to the distressing symptoms of pain and mucous discharge with irreducible prolapsed haemorrhoids (Figure 5).

Anal fissure

Anal fissure (fissure-in-ano) is a subacute condition that presents with intense and constant pain in the anal region. The pain is aggravated by bowel action and so the patient is reluctant or apprehensive to go to the toilet. The main finding on clinical examination is marked spasm of the anal sphincter, which makes a digital examination or anoscopy too painful to the patient. Gentle parting of the buttocks may reveal a lower end of the fissure, which is almost always at midline posteriorly (Figure 6).

Initial treatment for anal fissure is by adopting symptomatic treatment measures. These include avoiding constipation by a high fibre diet and faecal softeners, topical application of local anaesthetic gel and local application of glyceryl trinitrate (GTN) ointment.⁴ Topical GTN can be applied by the patient three times daily with instructions not to get it on normal skin to avoid dermal absorption of GTN. Transient headache is a common side effect.² Botulinum toxin can be injected at the lower border of the internal sphincter muscle at the site of the fissure, creating a chemical sphincterotomy, which lasts for approximately 3 months.⁵ By reducing the spasm it allows healing of the fissure. Unfortunately all too often such measures only produce temporary improvement.

If symptoms persist the patient should be referred to the specialist for a surgical procedure called lateral subcutaneous sphincterotomy. During this day surgery procedure, the distal half of the external anal sphincter muscle at 3 o'clock position is divided through a small stab incision in the perianal skin. This usually gives immediate relief of symptoms to the patient. Care should be taken not to damage the proximal half of the internal sphincter muscle, which could result in permanent faecal incontinence. However, incontinence or subtle symptoms (eg. loss of flatus or mucus) are possible complications even with a well performed sphincterotomy. A fistula could result if the anal mucosa at the site of the operation is incised.

Cancer of the anal canal and distal rectum

Although rarer than haemorrhoids, anal carcinoma can have a similar presentation. This condition should be detected on physical



examination of a patient who complains of anal symptoms. The symptoms are a persistent lump at the anal verge, feeling of a lump in the anal region, tenesmus and occasional bleeding and discharge from the anal region. Digital examination would confirm the suspicion of cancer. If facilities are available for a small biopsy, tissue should be sent for histopathology.

Distal rectal carcinoma may present with a haemorrhoid initially. This possibility should be kept in mind by the treating doctor and a proctoscopy and rigid or a flexible sigmoidoscopy is mandatory before making a decision on treatment of the haemorrhoid. This is especially important in all patients over the age of 40 years. All patients with haemorrhoids, tenesmus, and change in bowel habits should be referred to specialist for colonoscopy.

Conclusion

The GP has an important role in the early diagnosis and the management of the patient with perianal diseases. This may require a timely office procedure or when appropriate referral to specialist for surgical treatment. Cancer of the anal canal and the distal rectum could have a similar presentation to haemorrhoids and missing the cancer could have serious consequences to the patient.

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