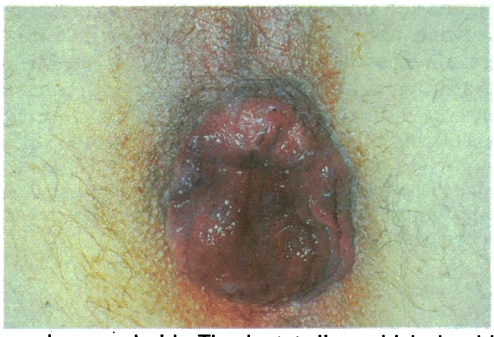
HAEMORRHOIDS

B D Hancock



Large haemorrhoids. The dentate line, which should be halfway up the anal canal, can be clearly seen separating the prolapsed anal cushions (autonomic innervation) from the secondarily congested external plexus (somatic innervation).

Haemorrhoids and related conditions are not popular with patients or doctors and are commonly relegated for treatment to a junior member of the surgical team. This is a pity because they are so common and may cause considerable distress, and with expert assessment many can be cured by outpatient measures.

Haemorrhoids (or piles) are displaced anal cushions. The cushions are normal structures that have a rich arterial supply leading directly into distensible venous spaces. They help seal the upper anal canal and contribute to continence. Constipation and straining disrupt the supporting framework of the cushions, causing them to become displaced and congested. In some patients this is aggravated by a tight internal sphincter, which leads to high intra-anal pressure during a bowel action.

Symptoms and diagnosis

Classification of haemorrhoids

- 1st degree—Bleeding only
- 2nd degree—Prolapse, reduces spontaneously
- 3rd degree—Prolapse, needs pushing back
- 4th degree—Prolapse, permanent

This traditional classification is useful because treatment is based on symptoms rather than appearances. It is misleading, however, because prolapse often precedes bleeding by many years and some patients have acute painful prolapse lasting days but with months or years between attacks.

Investigation of bleeding

Symptom	*Investigation*
Bright red blood:	
Seen only on paper	Inspection, rectal examination, and proctoscopy
Dripping into pan	Proctoscopy and rigid sigmoidoscopy
Mixed with motion	Proctoscopy and rigid sigmoidoscopy, fibre sigmoidoscopy optional
Dark red blood	Proctoscopy and fibre sigmoidoscopy, barium enema or colonoscopy optional

Bleeding and prolapse are the cardinal symptoms of haemorrhoids. Prolapse is often the first and only symptom, and consultation is commonly deferred until bleeding starts. Bright red blood dripping into and splashed around the pan after a bowel action suggests haemorrhoids whereas darker blood mixed with the motion and with mucus strongly suggests a tumour. But history alone is unreliable for a diagnosis, and rectal examination and proctoscopy are essential before attributing the bleeding to haemorrhoids. Sigmoidoscopy is often required; this will immediately disclose ulcerative proctitis, which is the other common cause of rectal bleeding.

Bleeding is more of a problem in younger patients because the sphincter tone is higher, and haemorrhoids may occasionally cause anaemia. In older patients haemorrhoids prolapse more and may bleed only when abraded by cleaning after a bowel action. Pain, if present, suggests a thrombosis or a coexistent fissure. Irritation and soreness are understandable if piles remain prolapsed and produce some mucus or if large skin tags exist which interfere with cleaning after a bowel action. Simple pruritus ani, however, is rarely due to haemorrhoids.

Haemorrhoids should not be diagnosed unless prolapse or bleeding is a dominant symptom, in conjunction with visibly distended or displaced anal cushions on proctoscopy. The patient should be asked to bear down to assess the degree of prolapse and to look for abnormal perineal descent, which, in its more severe form, can cause the symptoms of incomplete emptying, prolapse, or bleeding and must not be mistaken for haemorrhoids as the treatment is different.

Treatment

Treatment options

- *At home*
  - —Suppositories
  - —High residue diet
- *Outpatient*
  - —Injection
  - —Infrared coagulation
  - —Rubber band ligation
  - —Cryosurgery
- *Day case (with general anaesthesia)*
  - —Dilatation and banding
  - —Cryosurgery
- *Inpatient*
  - —Haemorrhoidectomy

The aim is outpatient treatment, and good results can be obtained by several methods, but the best results will be obtained if the surgeon learns one or two methods really well.

Simple strategy

- *Bleeding*
  - —Accurate diagnosis
  - —High residue diet
  - —Banding or infrared coagulation optional
- *Prolapse*

With strong sphincter
- —Dilatation and rubber band ligation under general anaesthetic as day case

With normal sphincter
- —Rubber band ligation as an outpatient

- *Permanent prolapse*
  - —Haemorrhoidectomy

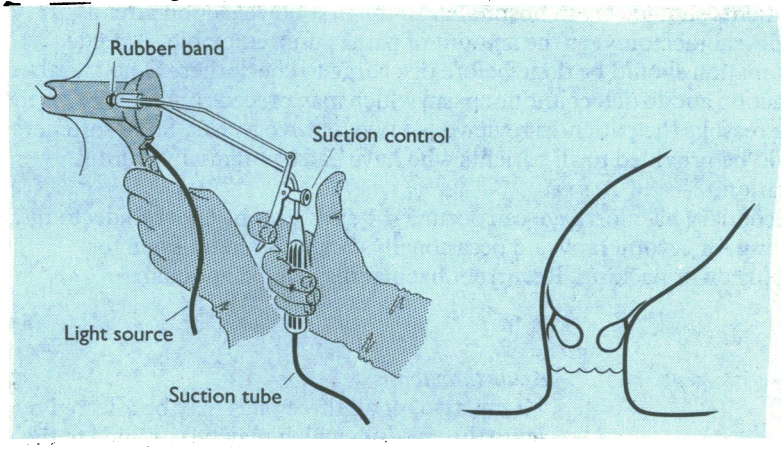
Non-operative

Suppositories and ointments have little more than a placebo effect, but a high residue diet may cure many patients of early disease.

Infrared coagulator.

Injection and infrared coagulation

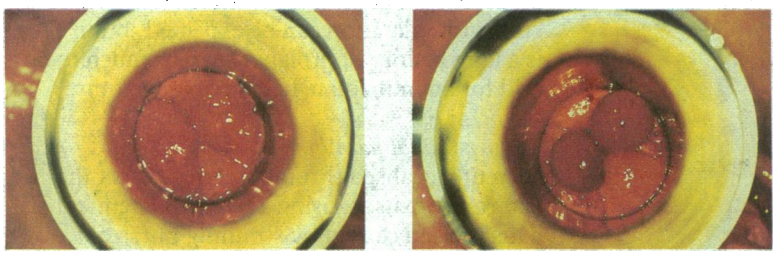
Both injection of 5% phenol in almond oil and infrared coagulation are effective for bleeding haemorrhoids with minimal prolapse. They work by tethering of the cushions at the level of the anorectal junction by means of inflammation or a small controlled burn. The coagulation method is to be preferred as it is easy to use, precise, less messy than the injection method, and free from complications.



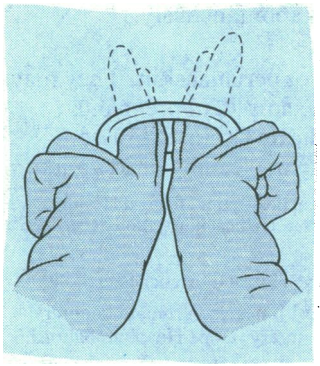
(Left) Suction banding instrument. The left hand controls the proctoscope while exposing the anal cushion. Suction draws some of the anal cushion into the cup and a rubber band is fired over the enclosed tissue to cause ischaemic necrosis. (Right) Banded haemorrhoids. Bands are placed well above the dentate line to avoid pain.

Rubber band ligation and cryosurgery

Rubber band ligation and cryosurgery are alternatives to haemorrhoidectomy in patients with large haemorrhoids. Both work by reducing the bulk of the internal haemorrhoid. Banding requires skill in placing the bands above the dentate line to avoid severe discomfort, whereas cryosurgery may result in an unpleasant discharge for up to two weeks. The development of a suction bander has made application of the rubber bands much easier in outpatient treatment and its use has almost replaced cryosurgery. With this instrument it is now possible to treat more than three quarters of patients with prolapsing haemorrhoids on an outpatient basis with long term relief, provided they are prepared to suffer a little discomfort for a few days. The method may well be readily accepted when it is an alternative to haemorrhoidectomy.



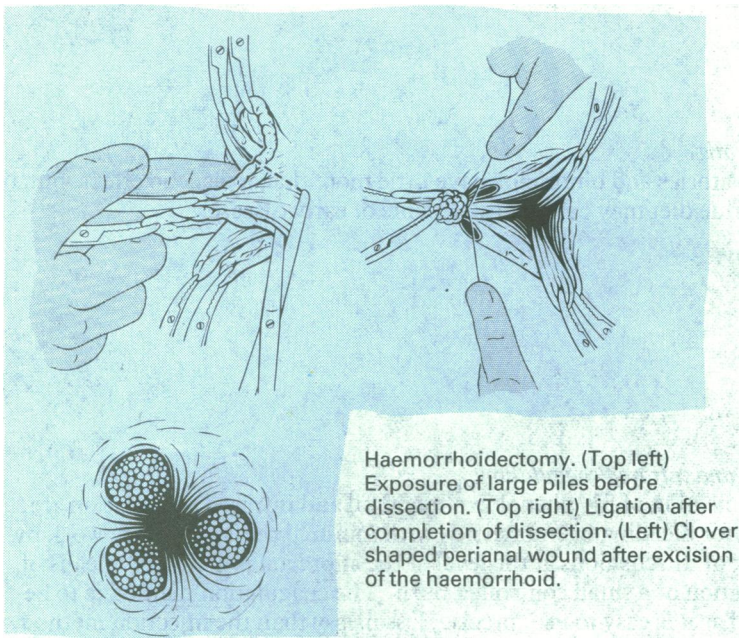
(Left) The three anal cushions seen through a proctoscope before banding. (Right) Proctoscopic appearance immediately after banding. Two haemorrhoids are usually banded at the first outpatient session. The remaining one is banded three weeks later.



Anal dilatation. Gentle four finger dilatation of the tight internal sphincter under anaesthesia is an important component of treatment in some patients.

Anal dilatation

When the anal sphincters feel tight on rectal examination, particularly if proctoscopy causes discomfort, rubber banding as an outpatient procedure may cause too much pain. The piles can be banded more thoroughly under general anaesthetic as a day case procedure. It is usual to perform a gentle anal dilatation because anal pressure studies have shown that the internal sphincter is overactive in this sort of patient. If used with discretion and care there is no risk to the sphincter mechanism. Sequential pressure studies show that anal pressure is restored to normal and remains so for many years. With this combination of treatment excellent long term results can be expected even for large piles. Dilatation must not be done if there is any hint of weakness of the sphincter, abnormal perineal descent, or long term diarrhoea.



Haemorrhoidectomy. (Top left) Exposure of large piles before dissection. (Top right) Ligation after completion of dissection. (Left) Clover shaped perianal wound after excision of the haemorrhoid.

Haemorrhoidectomy

Haemorrhoidectomy is reserved for patients with permanent prolapse or those with large piles who want a guaranteed cure. The long term results are excellent if the operation is done skilfully, but the cost is a variable amount of postoperative pain, an inpatient stay of a few days, and two to three weeks off work.

Care after haemorrhoidectomy

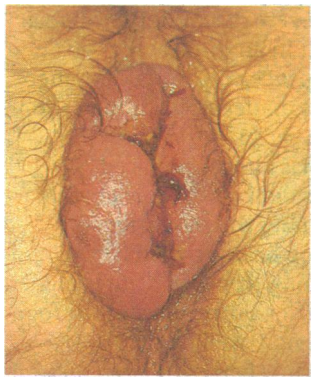
- Give adequate analgesia
- Give bulking laxative—for example, Normacol
- Patient should take frequent baths
- Patient should remain in hospital at least until first bowel action
- Perform rectal examination at about one week and again at three weeks postoperatively to check for anal stenosis and faecal impaction

Care after haemorrhoid operations

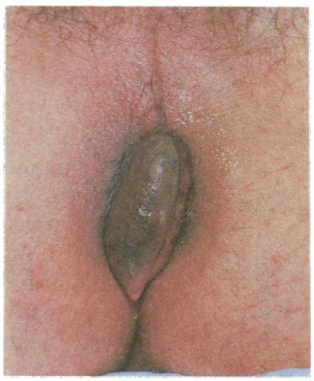
Patients should stay in hospital until the first bowel action after a haemorrhoidectomy, as the amount of pain is unpredictable. A rectal examination should be done before discharge to check there is no faecal impaction and to detect undue spasm which may precede a stenosis. For the same reasons the patient is reviewed at two to three weeks. Stool softeners should be provided to all patients who have had a potentially painful operation.

Secondary haemorrhage can occur 7-14 days after haemorrhoidectomy, banding, or cryotherapy and occasionally demands readmission for transfusion or packing. Recurrent haemorrhage is exceptional.

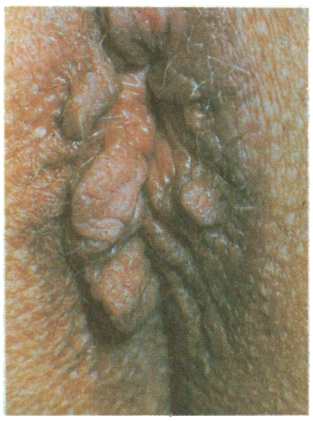
Associated problems



Acutely prolapsed thrombosed haemorrhoids.



Perianal haematoma.



Anal skin tags.

Acute thrombosis

One, two, or all three piles may be affected by acute thrombosis, which may be confined to the external plexus or the whole haemorrhoid(s). There is usually an underlying sphincter tightness with superimposed spasm, so in the first 48 hours after thrombosis anal dilatation will give great relief of pain. If this is the first attack lasting cure with dilatation can be expected, but if there is a long history of prolapse there is much to be said for an immediate haemorrhoidectomy.

Acute perianal haematoma

Acute localised thrombosis may affect the external plexus, causing a perianal haematoma. This is often caused by straining but is not associated with any internal haemorrhoids. The lesion appears as a tense blue swelling on the anal margin. Evacuation under local anaesthetic will give immediate relief, or the haematoma can be left until it discharges spontaneously.

Skin tags

Skin tags are hypertrophied redundant folds of perianal skin. They may represent the aftermath of haemorrhoids—for example, in pregnancy, though some are idiopathic and, rarely, can indicate Crohn's disease. Removal is indicated only if they cause difficulty in cleaning or irritation.

The photographs were produced by the department of medical illustration, Salford Health Authority, and the line drawings were prepared by Paul Somerset, medical illustration department, Wythenshawe Hospital.

Mr Brian D Hancock is consultant surgeon, Wythenshawe Hospital, Manchester.

The ABC of Colorectal Diseases has been edited by Mr D J Jones, lecturer and honorary senior registrar, and Professor M H Irving, department of surgery, Hope Hospital, Salford.