Haemorrhoids: piling on the agony

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Perianal disease is often considered ‘assumed knowledge’ among clinicians but is generally poorly understood. This article gives an overview of haemorrhoidal disease and its management options.

Haemorrhoid is derived from Latin and Greek to mean ‘flowing blood’ and its synonym ‘piles’ originates from the Latin word ‘pila’ meaning ‘balls’. It is an apt term for haemorrhoids, which clinically appear as ‘balls’ of blood in the perianal region in the advanced stages of prolapse.

The earliest clinical reports of haemorrhoids appeared in Babylonian and Assyrian medicine texts about 4000 years ago, and initial treatments that were reported included topical creams (1700 BC), ligation (300 AD) and cautery (400 AD).1,2 All three treatments are still used in some way today.

What is the extent of the problem?

Data from hospital episode statistics from the UK show that over 90,000 patients presented with haemorrhoidal disease in a 12-month period from 2015–2016.3 5000 of these presentations resulted in an emergency admission, of which 50% were men. Although the incidence of haemorrhoidal disease increases with age, about 30% occurs in patients less than 40 years old. Treatment strategies for haemorrhoids need to factor in potentially different risk factors according to the hobbies, occupations and lifestyles of each individual. Risk factors for men and women vary; for example, women may be more prone to developing haemorrhoids during pregnancy, whereas men may be more likely to develop haemorrhoids due to heavy lifting, straining or poor diet.4

Internal or external haemorrhoids?

Venous cushions in the anus act synergistically with the anal sphincters to provide fine continence control. They contribute to about 15–20% of the maximum resting pressures of the anal canal. During repeated straining (eg on defecation) the submucosal fibres holding these cushions in place can become stretched, leading to uncontrolled engorgement. This engorgement is the underlying feature of haemorrhoids.

It is very common to use the terms ‘internal’ and ‘external’ haemorrhoids in clinical practice; however, knowledge of the specific technical definitions will help in management strategies. Venous cushions in the anus arise from above the dentate line. On symptomatic engorgement, these are classified as internal haemorrhoids. As they enlarge further, these haemorrhoids prolapse beyond the anal verge and are referred to as external haemorrhoids (Figure 1).

There is also an external haemorrhoidal venous plexus, which...
surrounds the anal verge. When the external haemorrhoidal plexus becomes engorged, a perianal haematoma develops. As this enlarges it may cause pain, and when thrombosed is termed a ‘thrombosed perianal haematoma’. Management of the thrombosed perianal haematoma involves analgesics, application of ice and, in some circumstances, excision over the haematoma and evacuation of the clot for symptomatic relief.

### Symptoms of haemorrhoidal disease

Symptomatically, internal haemorrhoids can be divided into four categories (Table 1). Haemorrhoids are generally pain-free and if pain is a feature it is usually secondary to another underlying pathology, such as an anal fissure, which should be looked for at the time of initial presentation.

The natural history of haemorrhoids involves a gradual progression of symptoms over weeks to years. First-degree haemorrhoids often present with fresh red bleeding, sometimes in the pan and other times on the tissue, depending on the size. Second-degree haemorrhoids usually present with a complaint of a perianal lump that comes out during defaecation and then spontaneously reduces. Third-degree haemorrhoids are particularly worrisome for patients as the haemorrhoids prolapse and have to be manually reduced by gently applying firm pressure on the haemorrhoids, so that they are pushed back up into the anal canal. Fourth-degree haemorrhoids may present as an emergency in A&E and may also be painful due to the mass effect and surrounding inflammation. Other symptoms include mucous discharge, which can result in intense itching. A feeling of fullness in the perianal region may occur, along with a sensation that it is not entirely clean.

External perianal haematomas usually present in a slightly different way to haemorrhoids in that they usually have a short history, typically after a cough or heavy lifting, and present with a very painful lump around the anus. Patients will usually present to A&E or to their GP seeking urgent pain relief.

### Diagnostic issues

One of the concerns that patients have when they present to their doctor is whether they might have cancer. Any red flag symptoms suggestive of cancer (eg weight loss, reduced appetite or change in bowel habits) should warrant referral to a colorectal surgeon on the two-week wait pathway and urgent endoscopic examination (>40 years old with bleeding per rectally). Other differentials may include abscesses, fistulae, fissures, sexually transmitted diseases, infections such as tuberculosis, Crohn’s disease, warts and HIV.

### Primary care management

First-line management for haemorrhoids involves lifestyle and dietary changes. The advice should focus on specific features gained from the history and likely risk factors. In younger men, questions related to their occupation, weight training and hobbies should accompany advice regarding avoidance of sudden increases of high pressure during the Valsava movement. One method of doing this is to make a gradual transition from lighter to heavier weights with regular breaks in between. Other techniques are to avoid holding breath when lifting heavy objects and to breathe out during heavy lifting. In older patients the focus may be more directed towards increasing dietary fibre, water intake and mobility.

Straining on the toilet and prolonged toileting should be avoided. Reading and browsing while on the toilet should be avoided. Advice on dietary fibre should be tailored towards sources that can be easily purchased, such as fruit and wholemeal bread. If further fibre is required, then ispaghula husk may be purchased from most supermarkets. It is very important to stress that fibre should be taken in conjunction with increased water intake.

Sitz baths may help to relieve the symptoms of itching and aching, although there is a lack of evidence for their benefits and clear instructions are required to ensure burns do not occur from prolonged sitting in high-temperature baths. There is debatable benefit for steroid creams; some historical studies suggest a benefit if used for a maximum of seven days. Local anaesthetic creams, or creams containing zinc and bismuth, are likely to have a direct topical effect by soothing the area and reducing inflammation, which may help with some of the symptoms of haemorrhoids. A Cochrane review has advocated the use of flavonoids, either topically (Pycnogenol – pine bark extract) or orally (Daflon – micronised

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<thead>
<tr>
<th>Grade</th>
<th>Position</th>
<th>Description</th>
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<tr>
<td>First</td>
<td>Internal</td>
<td>Bleeding per rectally but no external prolapse. Usually painless</td>
</tr>
<tr>
<td>Second</td>
<td>Mainly internal</td>
<td>Bleeding with some external prolapse, which spontaneously reduces</td>
</tr>
<tr>
<td>Third</td>
<td>Mainly external</td>
<td>Prolapse of haemorrhoids requiring reduction manually</td>
</tr>
<tr>
<td>Fourth</td>
<td>External</td>
<td>Prolapse which is irreducible</td>
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Table 1. Classification and symptoms of haemorrhoids
purified flavonoid fraction), which may also help in symptomatic haemorrhoidal disease.7

Outpatient management in secondary care

If the measures above have not helped with the patient’s symptoms after four to six weeks, then a referral to a colorectal surgeon should be considered. It is likely that when the patient is seen in a clinic they will be referred for a flexible sigmoidoscopy and banding of haemorrhoids if necessary. Management of haemorrhoids on the day of clinic attendance has generally fallen out of favour, primarily for logistical reasons. Almond oil or similar may be injected at the area of the haemorrhoidal pedicle but should be avoided in men if there is an anterior haemorrhoid, due to the risk of developing prostatitis or prostatic abscesses.

Most centres favour rubber band ligation, which is generally quite efficacious and has similar outcomes to more invasive procedures, especially after repeat banding.8 At the time of proctoscopy (or flexible sigmoidoscopy) an assessment is made of the size of haemorrhoids and the largest one is usually banded with a rubber band. This constricts the blood flow to the haemorrhoid, which sloughs off after about 10–14 days. It is at this time that a secondary bleed may occur. Patients should be warned about this bleeding risk and advised to seek medical attention if it occurs. Banding of haemorrhoids should not be painful and if the patient complains of pain post-procedurally it is likely that the band has been applied slightly lower than the dentate line. Care should be taken to ensure that the patient does not suffer from a vasovagal episode as a result of this. Typically, the patient may feel discomfort and a tightness in the area and should expect a little bit of bleeding over the subsequent few days. Pain which develops after a few days should prompt urgent medical advice in a secondary care setting to exclude pelvic sepsis.

Other options include infrared coagulation (IRC) to the haemorrhoidal pedicle. Although IRC shows equivalent results to rubber band ligation, it is more expensive and involves a steeper learning curve.9

Secondary care surgical procedures

Surgical options for more advanced haemorrhoids or haemorrhoids refractory to the treatment methods above are haemorrhoidal artery ligation, open/closed haemorrhoidectomy and stapled haemorrhoidopexy. The general complications after these procedures are common to all the options and vary according to degree. These complications include bleeding, pain, infection, fissuring, stenosis, incontinence and recurrence.

Haemorrhoidal artery ligation involves using a Doppler probe to identify the haemorrhoidal feeding artery and a suture to ligate it, with subsequent shrinkage of the associated haemorrhoid. There have been good results from this procedure and it is a popular choice for managing haemorrhoids. There is sometimes a continuing bulge post-operatively unless the haemorrhoid is fixed proximally.

Open haemorrhoidectomy involves excision of the haemorrhoid with the mucosa and preservation of the intervening mucosal bridges. The haemorrhoidal pedicles are subsequently ligated. In closed haemorrhoidectomy the mucosa is closed as opposed to leaving it open.

In the UK, most haemorrhoidectomies are performed in an open manner to help prevent the build-up discharge and subsequent infections. Both procedures may be painful and application of glyceryl trinitrate/diltiazem creams or Botox injections at the time of the operation may help in relieving symptoms by preventing spasm of the internal anal sphincter.10 In addition, metronidazole may help prevent postoperative infections and micro-abscess formation.11

Stapled haemorrhoidectomy in expert hands is considered an option in some circumstances but is generally falling out of favour in the UK due to theoretical risks of damage to surrounding structures and strictures.12 Newer techniques such as the Rafaelo technique, using radiofrequency coagulation for internal haemorrhoids, are being employed in some centres and good results have been reported.

Conclusions

Haemorrhoids can be painful and debilitating and can cause significant reduction in quality of life.13 Additionally, significant blood loss can cause anaemia. Some centres have moved to one-stop clinics where a history, examination, flexible sigmoidoscopy and treatment is performed at the same visit. This may be the best practice model going forward.

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References