Dr Edward Cooper

Haemorrhoids

Introduction

Haemorrhoids are defined as the symptomatic engorgement of the anal vascular cushions, with or without prolapse. Represents the most common proctological disease, affecting up to 40% of the adult population, with a peak incidence between 45 – 65 years of age.

Anatomy

Haemorrhoids can be defined as internal or external, depending on their location relative to the dentate line. Internal haemorrhoids arise from the internal haemorrhoidal plexus above the dentate line, and external haemorrhoids arise from dilated submucosal venules of this plexus below the dentate line.

The internal anal cushions are normally maintained in their correct anatomical position via Treitz's muscle, which is a submucosal muscle anchoring the anal cushion to the internal anal sphincter.

Pathophysiology

A widely accepted theory in the pathogenesis of internal haemorrhoids is that fragmentation of Treitz's muscle leads to anal cushion engorgement and descent. The pathophysiology of haemorrhoids is still not completely understood but is believed to occur as a result of the loss of the supportive connective tissue in the anal cushions. Fragmentation of Treitz's muscle can be caused by shearing forces incurred during excessive straining and/or increased intra-abdominal pressure often associated with constipation/pregnancy.

Classification

Internal haemorrhoids can be graded based upon degree of descent, known as Goligher's classification. This can help stratify patients and help guide management.

- Grade 1: anal cushions that protrude into anal canal but do not prolapse
- Grade 2: anal cushions that prolapse with straining but reduce spontaneously
- Grade 3: anal cushions that prolapse with straining and require manual reduction
- Grade 4: anal cushions that are prolapsed and are unable to be reduced

Presentation

Haemorrhoids can present in a variety of ways but the list below are the most common symptoms.

- Bleeding: bright red; painless
- Prolapse
- Perianal itch/irritation
- Difficulty keeping perineum clean
- Pain: only a feature of haemorrhoids if it is thrombosed or prolapsed. If no features of these on examination, then pain should raise suspicion of an underlying anal fissure

Diagnosis

A history of bright red blood, coating stool or on the toilet paper is common. If anal pain or post defaecatory pain is a prominent symptom, this raises the suspicion that it is an anal fissure rather than haemorrhoids.

Haemorrhoids are difficult to appreciate on digital rectal examination alone (unless they are prolapsed or thrombosed). Instead, a proctoscope is the best instrument to demonstrate and assess internal haemorrhoids.

Management

Internal Haemorrhoids

All patients with PR bleeding should be referred for endoscopic investigation, whether it be a flexible sigmoidoscopy or colonoscopy. If the scope excludes a sinister cause for symptoms and confirms presence of haemorrhoids then management is outlined below.

All patients with haemorrhoids should be educated on making appropriate dietary and lifestyle changes. I often ask patients to institute the following:

- Drink 1.5 – 2L of water per day
- Follow a high fibre diet
- Commence a fibre supplement
  – Recommended daily fibre intake is 30g/day. The vast majority of Australians do not eat enough fibre!
  – Recommend soluble fibre supplement such as Metamucil
  or Benafiber
- Use apierents as required to avoid constipation
- Avoid straining and spending prolonged periods of time on toilet.
- Use a foot stool to lift the knees above the level of the hips. This straightens the anorectal junction and facilitates defaecation

As mentioned earlier, management can be guided by the Goligher grading of haemorrhoids.

- **Grade 1: Lifestyle and Dietary Modification**
  - Making the appropriate lifestyle and dietary changes listed above will resolve bleeding in vast majority of cases
- **Grade 2: rubber band ligation +/- sclerotherapy**
  - Rubber band ligation is effective for grade 2 haemorrhoids with success rates of 70%
  - Advantages of banding:
    - it can be performed at time of colonoscopy or as an office-based procedure
    - easily repeated if required
    - effective/cheap
    - minimal pain
  - Banding is contraindicated in patients on anticoagulants or with underlying bleeding disorders. In these patients, haemorrhoid artery ligation with rectoanal rectopexy (HALRAR) is the best initial intervention

Grade 3: RBL or haemorrhoid artery ligation rectoanal rectopexy (HALRAR) or haemorrhoidectomy

- The ideal treatment of Grade 3 haemorrhoids is still debated amongst colorectal surgeons due to the variety of options available
- While banding is a valid option, patients often require multiple banding sessions before achieving the desired result
- Haemorrhoid artery ligation is an effective option and has reduced postoperative pain compared to an excisional haemorrhoidectomy. However, studies suggest that the recurrence rate over time is higher when compared to an excisional haemorrhoidectomy
- Excisional haemorrhoidectomy has the lowest rates of recurrence but is associated with more postoperative complications (pain, bleeding, stenosis, sphincter injury)

- **Grade 4: Excisional haemorrhoidectomy**
  - The definitive procedure for significant Grade 4 haemorrhoids

Acutely Thrombosed Haemorrhoids

These patients present with acute anal pain and an associated enlarged tender lump. Pain is usually severe for the first few days and then gradually subsides. If the patient presents within 72 hours, excision of the thrombosed haemorrhoid or surgical removal of the clot may be performed. After 72 hours, the discomfort of any surgery often exceeds the relief provided by it and in this phase of resolution, surgery should be avoided. In that instance, which is the most common scenario, the mainstay of treatment is supportive therapy including analgesia, sitz baths and apierents.

Referral

- Any patient with PR bleeding should be referred to a surgeon for further assessment.
- While haemorrhoids are often the most common cause, we are seeing an increase in young adults presenting with colorectal cancer. Therefore, all patients with PR bleeding should be referred for workup including a flexible sigmoidoscopy or colonoscopy to exclude a sinister cause for their symptoms before proceeding to manage their haemorrhoids.

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