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## A Clinical Review on Haemorrhoids – Its Presentation and Management



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### ABSTRACT

Anorectic disorders progressively increasing day by day in society and their prevalence in the general population is probably much higher than that seen in clinical practice. Detail the key proctological symptoms to include pain, constipation, bleeding, altered bowel habit, incontinence, swelling, discharge, and irritation. A family history with documentation and anal operation must be recorded in the sequence. Many individuals experience this condition without seeking medical consultation; patients are often reluctant to seek medical help because of embarrassment or the fear, discomfort, and pain associated with the treatment, so the exact incidence of this disease cannot be estimated. Haemorrhoids are an extremely common condition; affecting approximately 10 million persons per year. The presentations of symptoms in patients with anorectal pathologies are mostly typical, but they may be misleading due to the patient's understatement or underplaying of symptoms. Several risk factors have been claimed to be etiologies of hemorrhoid development including aging, obesity, abdominal obesity, depressive mood, and pregnancy. The most common presentation of hemorrhoids is painless rectal bleeding during defecation with or without prolapsing anal tissue. Lifestyle modifications are an integral part of the treatment of hemorrhoidal disease. They should be offered to patients with stages of hemorrhoidal disease as a part of a comprehensive treatment regimen, as preventive measures. In Europe and Asia, oral vasotopic drugs are used for the treatment of varicose veins, venous ulcers, and edema. The use of over-the-counter medications is omnipresent in the treatment of hemorrhoids and includes pads, topical ointments, creams, gels, lotions, and suppositories.

## **INTRODUCTION:**

Anorectic disorders progressively increasing day by day in society and their prevalence in the general population is probably much higher than that seen in clinical practice. In Indian culture, most of the patients do not disclose their problem being in the sensitive region.

Primary anorectic disorders that may cause perianal irritation include hemorrhoids, fissures, fistula, chronic anorectic sepsis, proctitis, or proctocolitis, skin tag, anal warts, hidradenitis, rectal prolapsed and some rectal tumors, especially villous adenoma and rectal polyps, and rectal or anal carcinoma [1].

## **HISTORY TAKING:**

Detail the key proctological symptoms to include pain, constipation, bleeding, altered bowel habit, incontinence, swelling, discharge, and irritation. A family history with documentation and anal operation must be recorded in the sequence [2]. Anorectal pain is usually associated with an anal fissure or an abrasion in the anal canal. Tenesmus, which is a symptom complex of straining and the urge to defecate, is frequently associated with inflammatory or neoplastic conditions of the anorectum. Because the lower anal obtains its innervations from the somatic nervous system, any pain-producing lesion in the anal canal is likely to be described as sharp, burning, cutting, or stinging. The pain associated with an anal abscess is usually described as throbbing in nature. Pain that increases in intensity when the patient coughs or sneezes often is associated with an intersphincteric abscess. Because anorectic pain may be referred to as the sacral region, great care must be taken in eliciting the history as it relates to a bowel movement. The typical history of levator ani muscle spasm, better known as referred pain to the rectum may occur from retrorectal aneurysmal dilations in the pelvic vascular tree or from retro rectal tumors. Usually, this condition is described as a feeling of fullness in the area. Coccygeal pain rarely is anal in origin; most patients who complain of this type of pain have sustained some trauma to the ligaments or periosteum of the coccyx. Occasionally when a presacral cyst is inflamed, the pain may be referred to as the coccyx [3].

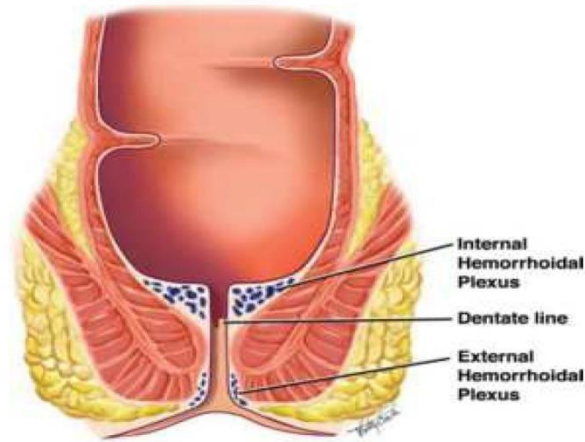
## **EPIDEMIOLOGY:**

Many individuals experience this condition without seeking medical consultation; patients are often reluctant to seek medical help because of embarrassment or the fear, discomfort, and pain associated with the treatment, so the exact incidence of this disease cannot be estimated. Studies evaluating the epidemiology of hemorrhoids showed that 10 million people in the United States reported hemorrhoids, for a prevalence is noted in between 45 and 65 years of age, development of hemorrhoids before the age of is unusual, and Caucasians are affected more frequently than the African and Americans [4, 5].

Haemorrhoids are an extremely common condition; affecting approximately 10 million persons per year. One study estimated that more than 50% of the U.S population over age 50 years has experienced hemorrhoids.

## **ANATOMY:**

Haemorrhoids are an extremely common condition; affecting approximately 10 million persons per year. One study estimated that more than 50% of the U.S population over age 50 years has experienced hemorrhoids [6]. Hemorrhoids represent normal, submucosal, venous structures in the lower rectum and anal canal that may be internal and external hemorrhoids that originate below the dentate line. Internal hemorrhoids arise from the superior hemorrhoidal plexus. They are viscerally innervated with overlying rectal mucosa and are thus painless. Internal hemorrhoids arise above the dentate line and are covered by columnar epithelium, while external hemorrhoids arise below the dentate line and are covered by squamous epithelium [7]. External hemorrhoids that arise from the interior hemorrhoids originate from the inferior haemorrhoidal plexus, have a somatic intervention that contains numerous pain receptors and are covered by squamous epithelium. Internal hemorrhoids are graded from 1 to 4. Grade 1 hemorrhoids bulge into the lumen but do not extend distally to the dentate line. Grade 2 hemorrhoids prolapsed out of the anal canal straining but reduce spontaneously. Grade 3 hemorrhoids prolapse out of the anal canal with straining and require a manual reduction in to normal position. Grade 4 hemorrhoids are not able to be reduced are at risk for strangulation. There is no conventionally used for grading external hemorrhoids.



The pathogenesis of symptomatic hemorrhoids is not completely understood but likely involves the weakening of the anchoring connective tissue which can then cause prolapsed internal hemorrhoids into the anal canal and protusion of external hemorrhoids below the anal sphincter. Swelling and engorgement of the haemorrhoidal plexi occur due to factors that increase intraabdominal pressure, such as straining, constipation, pregnancy, and prolonged sitting [8].

#### **SYMPTOMATOLOGY OF ANORECTAL PATHOLOGIES:**

The presentations of symptoms in patients with anorectal pathologies are mostly typical, but they may be misleading due to the patient's understatement or underplaying of symptoms. The common symptoms denoting anorectal pathology are in the order.

1. Anal pain
2. Bleeding per rectum
3. Pus discharge from and around the anus
4. Prolapse
5. Anal pruritis
6. Presence of swelling or lump in or around the anus
7. Passage of mucus per rectum
8. Constipation or fecal obstruction

9. Frequency of stool

10. Difficulty in passing stool

11. Incontinence to flatus or feces

The key to diagnosis remains the patient history, with confirmation by visual inspection and anoscopy. Expensive workups are usually not required. Based on the symptoms and possible differential diagnosis, further investigation is necessary. The common anorectal lesions encountered in the family practice.

### **COMMON ANORECTAL LESIONS:**

#### **Commonest:**

- Hemorrhoids [Internal & external]
- Anal fissures [Acute or chronic]
- Anal fistula [low or high]
- Abscesses [Perianal, Ischio-rectal, submucous]
- Polyps [Adematous, fibrous anal, juvenile]
- Rectal Prolapse [Mucosal or complete]
- Anal skin tag or senital pile
- Anorectal sepsis [Hyderadenitis, suppuritiva, AIDS, Syphilis]

#### **Less common:**

- Sacrococcygeal pilonidal sinus disease
- Neoplasm [Beningn or Malignant]
- Condylomas
- Connective tissues masses like papilloma, fibroma, and lipoma,

- Antibioma [Organised abscess]
- Inflammatory conditions [proctitis, Anal cryptitis, and papillitis]
- Inflammatory bowel disorders [Ulcerative colitis and Crohn's disease]
- Hypertrophied anal papillae.

**Uncommon:**

- Strictures of anal canal or rectum,
- Solitary rectal ulcer
- Incontinence [Flatus or feces]

**RISK FACTORS:**

Several risk factors have been claimed to be etiologies of hemorrhoid development including aging, obesity, abdominal obesity, depressive mood, and pregnancy [9]. Meanwhile, some conditions related to increased intraabdominal pressure, such as constipation and prolonged straining, are widely believed to cause hemorrhoids as a result of compromised venous drainage of hemorrhoid plexus [10]. Some types of food and lifestyle, including low fiber diet, spicy foods, and alcohol intake, were reported to link with the development of hemorrhoids and the aggravation of acute hemorrhoid symptoms [11].

**DIAGNOSIS:**

The most common presentation of hemorrhoids is painless rectal bleeding during defecation with or without prolapsing anal tissue. The blood is normally not mixed in stool but instead coated on the outer surface of the stool, or it is seen during bowel movement. During the initial evaluation of the patient, other possible causes for the previously mentioned symptoms should be excluded. Colorectal and anal cancer, inflammatory bowel disease, and anorectal melanoma are all possible causes of rectal bleeding, perianal region, painless bleeding, and a perianal mass [12, 13].

**DIAGNOSTIC TESTS:**

In most cases, diagnosis is easily made on the physical examination, preferably accompanied by the anoscopy. In the absence of thrombosis, acute and anal pain during examination is rare in patients with uncomplicated hemorrhoids disease and might imply the presence of another disease, such as an abscess, fissures, or trauma of the examination. Acute pain may require an evaluation under anesthesia in the operating room. The side-viewing anoscope, and not a retroflexed end viewing instrument [flexible sigmoidoscope or colonoscope], is optimal.

GRADE 1	GRADE 2	GRADE 3	GRADE 4	COMPLICATED
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Dietary and lifestyle medication (such as high-fiber diet, laxative, hydration, avoidance of straining)

Medication (Topical or systemic)

Office-based procedure (such as banding, sclerotherapy)

Non-excisional operation (such as DG-HAL, SH/PPH)

Excisional operation (such as open and closed haemorrhoidectomy)

**LIFESTYLE MODIFICATIONS:**

Lifestyle modifications are an integral part of the treatment of hemorrhoidal disease. They should be offered to patients with stages of hemorrhoidal disease as a part of a comprehensive treatment regimen, as preventive measures. These changes include improving anal hygiene, increasing the intake of dietary fiber and fluids in the diet, and avoiding constipation or diarrhea. Some of these measures were found to have therapeutic and preventive effects, increasing the amount of fiber in the diet may relieve pain, bleeding, and prolapsed and size baths are useful for relieving anal pain and maintaining anal hygiene [14, 15]. Another venotonic drug is Calcium Dobesilate. It

improves the response of symptomatic acute attacks of first- and second-degree internal hemorrhoids when added to lifestyle modification [16].

#### **ORAL MEDICATION:**

In Europe and Asia, oral vasotopic drugs are used for the treatment of varicose veins, venous ulcers, and edema. Purified flavonoid fraction is a botanical extract from citrus. It extracts its effects on both diseased and intact vasculature, increasing vascular tonic, lymphatic drainage, and capillary resistance. It is also assumed to have inflammatory effects and promote wound healing. Lately, several randomized controlled flavonoid fractions in the treatment of hemorrhoidal bleeding [17, 18].

#### **TOPICAL TREATMENT:**

The use of over-the-counter medications is omnipresent in the treatment of hemorrhoids and includes pads, topical ointments, creams, gels, lotions, and suppositories. These preparations may contain various ingredients such as local anesthetics, corticosteroids, vasoconstrictors, antiseptics, keratolytic, protectants [such as mineral oils, cocoa butter], astringents [ingredients that cause coagulation, such as witch hazel], and other ingredients [19].

Topical application of corticosteroids may ameliorate local per anal inflammation, but long-term use of high potency corticosteroid creams should be avoided, per anal skin. Most of these products help the patient maintain personal hygiene, and may cause alleviate symptoms of pruritis and discomfort. No prospective randomized trials are suggesting that they reduce bleeding or prolapsed [20, 21].

#### **OUTPATIENT INTERVENTIONS:**

Various outpatient treatments for hemorrhoids exist, In the UK and many other countries, rubber band ligation is the most commonly performed of these therapies. RBL uses a device that allows a band to be applied to each hemorrhoid via a proctoscope. This band constricts the blood supply causing hemorrhoid to become ischemic before being sloughed approximately 1-2 weeks later. Although easy to perform, and with a short learning curve, care has to be taken to place the bands correctly to reduce the potential for severe pain [22]. The disadvantage of RBL as an office procedure is that it usually requires two operators to perform the procedure: one needs to



maintain the anoscope/proctoscope in position while the other holds the ligator and the grasping forceps. To obviate the need for an assistant, numerous devices have been developed [23].

#### **INJECTION SCLEROTHERAPY:**

Sclerotherapy is frequently done without anesthesia: the anoscope or proctoscope is passed through the anal canal into the rectal ampulla and then withdrawn until the mucosa “prolapse” over the opening of scope. After the hemorrhoidal is identified, the submucosa at the base of the hemorrhoidal is injected with 5 ml of 5% phenol oil, vegetable oil, quinine and urea hydrochloride or hypertonic salt solution. Injection of the sclerosant solution directly into the hemorrhoidal vein should be avoided because it can cause immediate transient precordial and upper abdominal pain. The injection of an irritant sclerosant produces edema, inflammatory reaction with proliferation, of fibroblasts, and intravascular thrombosis, this reaction creates submucosal fibrosis, scarring which prevents or minimizes the extent of the mucosal prolapsed and potentially reduces the hemorrhoidal tissue itself [24].

#### **OTHER THERAPIES:**

##### **Bipolar, direct current, and radiofrequency**

Application of low wattage bipolar diathermy results in tissue coagulation. The process takes up to 30 seconds and multiple applications to the same site are often required. Complications including pain, bleeding, and fissuring, occur in around 10% of patients.

Direct current therapy has gained recent favor in the form of Ultroid therapy, although the reasons for its popularity, other than aggressive marketing are unclear. The procedure involves the application of a low direct current for around 10 minutes per hemorrhoid. Results are at best equivalent to injection sclerotherapy and RBL, but with the procedure taking significantly longer [25].

Radio frequently ablation cuts and coagulates hemorrhoidal tissue less power [and hence less temperature] than the other electrical equipment. A comparison with RBL suggested similar efficacy to RBL with less pain. Again, equipment is expensive and the procedure has not gained universal acceptance [26].

## Surgical treatment

Hemorrhoidectomy: Surgical excision of hemorrhoids is perhaps one of the oldest operations ever performed. Although there are numerous variations of the technique two essential operations exist: open excision [Millan –Morgan] and closed hemorrhoidectomy [Ferguson]. For the open technique, the skin-covered external element of the hemorrhoidal is excised together with the mucosal element with ligation to the hemorrhoidal pedicle, taking care to preserve the intervening mucosal bridges. Ferguson hemorrhoidectomy also removes the vascular haemorrhoidal tissue but preserves the anoderm, theoretically limiting postoperative discharge and accelerates the healing process [27]. More recent ‘advances’ in the open technique have involved different technologies to excise the haemorrhoidal including the diathermy, lasers, and ultrasonic dissectors. A variation of the Ferguson technique involves the Ligasure [Medtronic Minn] coagulator which is postulated to seal the tissue with minimal thermal spread resulting in a less post-operative period. All of these techniques have potential complications including pain, bleeding, urinary retention, infection, iatrogenic fissuring, stenosis, and incontinence [28].

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