

Enlarged vascular cushions → prolapse into anal canal following straining or high sphincter tone.

### Classification

*Internal haemorrhoids:* Originate above dentate line. Covered by mucosa and no sensory innervation. Sub-classed by degree of prolapse:

- 1<sup>st</sup> degree: bleed but do not prolapse
- 2<sup>nd</sup> degree: prolapse but reduce spontaneously
- 3<sup>rd</sup> degree: prolapse but can be reduced manually
- 4<sup>th</sup> degree: permanently prolapsed and cannot be reduced

*External haemorrhoids:* Originate below dentate line Covered by squamous epithelium and have sensory innervation. Lie just inside and outside the anal verge. May be visible on external exam.

### Epidemiology

- Very common, probably >50% pop at some time. Prevalence increases with age.

### Risk factors

Constipation, diarrhoea, prolonged straining, increased abdominal pressure such as ascites or pregnancy, childbirth, heavy lifting, chronic cough, anal intercourse and hereditary factors.

### Assessment

*History:* Bright red PR bleeding separate from stool. Anal itching and irritation from chronic mucus discharge. Rectal fullness or discomfort on prolapse. Pain if incarcerated or thrombosed. Soiling may occur with 3rd or 4th degree haemorrhoids.

*Exam:* May see nothing if 1st/2nd degree internal haemorrhoids, otherwise bluish, soft bulging internal piles at 3, 7 & 11 o'clock positions, or skin covered external haemorrhoids. Even on PR exam hard to feel internal piles. The perineum may be macerated from chronic mucus discharge.

### Investigations

- FBC & proctoscopy.

### Management

- Internal haemorrhoids:
  - Mild-mod symptoms: Conservative Rx (reduce prolapse, warm baths, topical analgesia ± steroid, stool softeners e.g. **lactulose**)
  - Haemorrhaging 1<sup>st</sup> / 2<sup>nd</sup> degree: Sclerotherapy (5% phenol) or rubber band ligation
  - 3<sup>rd</sup> degree, strangulation or persistent 1<sup>st</sup>/2<sup>nd</sup> degree probs: Haemorrhoidectomy.
- External haemorrhoids:
  - Thrombosed external haemorrhoids <72h of pain: I&D
  - >72h after pain onset: Conservative Rx (analgesia, cold compresses, LA)

### Complications

- Haemorrhage & anaemia, thrombosis, ulceration, skin tags, perianal irritation

### Prognosis

- 10% of people need surgery.
- Haemorrhoids in pregnancy usually resolve after delivery.
- Thrombosed external haemorrhoids usually resolve spontaneously in 2-4w if not treated.

### Prevention

- Avoidance of constipation/straining with a high fibre, high fluid diet

## Perianal Haematoma

Acute rupture of inferior haemorrhoidal plexus tributary.

Painful lump after straining. May spontaneously rupture. Most resolve within a week.

*Mx:* Analgesia or I&D if in acute phase.

## Anal Fissure

Longitudinal/elliptical tear most often posterior midline at anal verge, usually 2° to constipation. Anal intercourse or rectal exam can also cause it.

Acutely painful with pain on defecation. Small amount of bright red bleeding.

*Mx:* Local anaesthetic (**lignocaine**) ointment, stool softeners (**lactulose** or **ispaghula**), topical steroids (**hydrocortisone**). If becomes chronic or spasm then topical **GTN** or **CCB**. Surgery if chronic includes sphincterotomy or anal stretch.

## Perianal Abscess

May be caused by infection of anal fissure, perianal haematoma, hair follicle, blocked anal glands, or STDs.

**Risk factors:** DM, immunocompromised, anal sex, IBD, carcinoma.

**Types:**

- **Perianal abscess** (~50%): direct extension of sepsis in intersphincteric plane caudal to the perianal skin.
- **Ischiorectal abscess** (20-40%): extension of sepsis through external sphincter into ischiorectal space.
- **Intersphincteric abscess** (<20%): sepsis confined to intersphincteric space.
- **Supralevator abscess** (<10%): produce horseshoe abscess track.
- **Postanal abscess:** posteriorly based below the level of the anococcygeal ligament.

**Features:**

- Painful, erythematous, hardened tissue in the perianal area ± discharge of pus, ± fever
- A rectal examination may confirm the presence of an anorectal abscess.

**Management**

- Analgesia, I&D under *GA* + check for fistula. ABx only if unless DM or immunosuppressed.

**Complications**

- Anal fissure in up to 30-60%, recurrence, scarring

## Pilonidal Sinus

Localised infection in natal cleft assoc with ingrowing hair.

*Mx:* Analgesia, ABx I&D.

## Anal Fistulae

- Fistulas occur in 30-60% of patients with anorectal abscesses.
- 80% of recurrent abscesses are associated with a fistula.
- Also may be associated with diverticular disease, IBD, malignancy, TB and actinomycosis.

*Mx:* Lay open by fistulotomy or fistulectomy. If high may req defunctioning proximal colostomy.