“The State of the Bottom” address:
Management of common anorectal conditions

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Introduction

• Large problem
• Often neglected
• Embarrassing to report
• May significantly affect QoL
• Association with pelvic floor dysfunction
• May represent worrying pathology
Symptoms

• Pain/ discomfort
• Bleeding PR
• Discharge
• Pruritis
• Lump
• “Difficult to clean”
• Incontinence
History & Gen Examination

- Complaint
- Aggravating/relieving factors
- Painless PR bleeding
- Unexplained change in bowel habits > 6 weeks
- Perianal instrumentation
- Spinal trauma
- Obstetric history
- Family History of Colorectal cancer, IBD
- Medications: e.g. Nicorandil

O/E
- Anaemia
- Signs of Hypothyroidism
- Axillary/groin examination
- Abdominal exam
- Signs of liver disease
Examination of the anus

Left lateral (Sims position)

• Inspection
  Underclothes- “skid marks”/blood/ mucus
  Perianal massage (external fistulous opening)
  Valsalva manouvre
  DRE inc sphincter assessment
• Rigid sigmoidoscopy
• Proctoscopy
Digital rectal exam

“A few quiet words from the doctor can prevent many loud ones from the patient…”

(Bailey & Love’s Short Practice of Surgery 1988)
Digital rectal exam

- **Intraluminal**
  polyp; foreign body
- **Intramural**
  polyp, cancer
- **Extramural** – (Beware the cervix/ tampons)
  ovarian cancer
cervical cancer
sigmoid cancer
pelvic abscess
Rigid sigmoidoscopy

- Visualise mucosa upto 22 cms
- Useful for mucosal abnormalities
- Biopsies may be taken
- Small polyps may be excised
Proctoscopy

- Visualises anal canal
- Can grade haemorrhoids
- Useful for therapeutic measures like injection sclerotherapy, suction banding
Pathology

- Mechanical
  Haemorrhoids
  Fissures
  Prolapse
- Inflammatory
  Abscess
  Fistula
- Neoplastic
  Benign
  Malignant
Haemorrhoids

Greek: *haem* (Blood) + *rhoos* (flow)
Latin: *pila* (ball or swelling)
Anatomy

- Anal cushions consist of mucosa, fibroelastic tissue and smooth muscle on anteriovenous channels
- Contribute to fine control over continence
- H’oids develop when the supporting submucosal fibres of the anal cushions fragment
- Cushions engorge excessively with blood causing bleeding and prolapse
- External piles – dilated vascular plexuses located below the dentate line
Clinical Picture

- Bleeding PR
- Prolapse
- Mucus discharge
- Perianal itching
- Discomfort (Pain usually when thrombosed)
- Associated with constipation & straining
Grading of Haemorrhoids/Piles

<table>
<thead>
<tr>
<th>Stage I</th>
<th>Stage II</th>
<th>Stage III</th>
<th>Stage IV</th>
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</thead>
<tbody>
<tr>
<td>No protrusion of haemorrhoids, yet.</td>
<td>Protruding haemorrhoids that spontaneously reduce!</td>
<td>Protruding haemorrhoids, possible to push back in manually!</td>
<td>Protruding haemorrhoids that can't be pushed back in manually anymore!</td>
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</table>
Management

• Investigations to rule out proximal cause of bleeding (colorectal cancer/ polyps/ IBD)

• Symptoms govern treatment

• Less than 10% of patients referred for symptomatic haemorrhoids will come to surgery
Treatment

1\textsuperscript{st} degree
HFD + fluids
Stool softeners

2\textsuperscript{nd}/3\textsuperscript{rd}/4\textsuperscript{th} degree
Haemorrhoidectomy
PPH
HALO

2\textsuperscript{nd}/3\textsuperscript{rd} degree
Rubber band ligation
Injection Sclerotherapy

Symptoms govern treatment
Rubber band ligation

• Outpatient procedure
• Applied to base of haemorrhoid(s)
• Three haemorrhoids can be banded at one time
• Relatively painless, but may get tenesmus
• 60-80% effective
• According to some, most effective outpatient treatment (BMJ 2003)
• 2-5% risk of secondary haemorrhage
Injection Sclerotherapy

- Outpatient procedure
- Submucosal injection around pedicle causes fibrosis, reducing blood flow
- Common agent: 5% Phenol in Almond Oil
- About 70% effective
- Deep injections can cause infection, urethral irritation, prostatitis
- May require > 1 session
HALO
(Haemorrhoidal Artery Ligation Operation)

- Doppler based ligation of feeding vessel
- Combined with posterior anopexy
- Day case
- Virtually pain free
- Not useful if large prolapse
- 8-10% PRB/ prolapse at 1yr
- Long terms results awaited
Stapled haemorrhoidopexy or PPH

- Reduces prolapse by excising circumferential band of prolapsed anal mucosa above dentate line, using circular stapling device.
- Interrupts blood supply to piles
- “Pexy” because it hoists the haemorrhoids back
- Selective patients
- Recurrent prolapse (X MMH)
Milligan-Morgan Haemorrhoidectomy

- Traditional (first described in 1937)
- “If it looks like a clover, the trouble is over; if it looks like a dahlia, it’s surely a failure.”
- Postoperative pain
- Low recurrence rates
- Day case surgery possible in over 80% patients
A patient with painful haemorrhoids usually has a fissure in ano
Fissure- in- ano (1)

- Common
- Linear ulcer in anal canal epithelium just distal to the dentate line
- 10-15% of new referrals to colorectal clinics
- Painful defaecation + bleeding PR
- Most common cause of anal pain
- Concomitant haemorrhoids may be present
- Associated with straining, commonly constipation; at times with diarrhoea due to tenesmus
- At times, post haemorrhoidectomy - excess skin removed
Fissure- in- ano (2)

- Acute fissures
- Chronic fissures:
  - persistent after 6 weeks of medical treatment
  - assoc with sentinel skin tag
  - caused by sphincter hypertonia/ anal canal ischaemia
- O/E: sentinel skin tag/ hypertrophied anal papilla may be seen on parting anal margins
  limited exam due to tenderness
  sphincter spasm
  fissure usually palpable 60/c
  “vertical button hole”
Fissure- in- ano (2)

- Treatment (at times presumptive)
  EUA to rule out anorectal sepsis/ malignancy
  Avoid constipation: High fibre & fluid intake
  Medical treatment:
    Topical 0.4% GTN/ 2% Diltiazem
    Botox
  Surgical treatment
Medical Treatment

Relaxation of IAS tone is achieved by the reduction of intracellular Ca\(^{++}\) in the smooth muscle cells, reducing muscle tone. This can be achieved by:

- nitric oxide donation using GTN or
- by direct intracellular Ca\(^{++}\) depletion using Ca\(^{++}\) channel blockers (diltiazem)
- Irreversible acetylcholine neuromuscular blockade using Botulinum toxin also reduces resting tone
Medical Treatment

GTN cream

• Vasodilator causing smooth muscle relaxation
• Healing in 60% in short-term, with recurrence of 30% over 18 months
• Dose (0.2% or 0.4%) does not influence efficacy, but increases side effects
• Pt compliance issues: 25-30% suffer from headaches

Diltiazem cream

• Similar efficacy to GTN (RCT)
• Good patient compliance—rarely headaches, occasionally pruritis ani
• Unlicensed
Botox

- Transient relaxation of IAS for 3 months
- Similar healing to GTN
- Used in pts not responding to GTN/DZM
- Intra/ intersphincteric
- May be performed as OP procedure
- GA: EUA performed
- Useful in ladies due to occult obstetric trauma
- Promotes healing in 70-96%
- Costs £ 200/ 100 units
The surgical option

• Lateral sphincterotomy
• Fissurectomy
• Anal advancement flaps
• Lord’s dilatation - historic!
Lateral sphincterotomy

• For patients who fail medical treatment
• More effective than medical management
• > 90% cure rate
• 30% flatus incontinence/ soiling/ mild mucus discharge
• Open vs closed- no difference
• Tailored sphincterotomy: decreased incontinence
Surgical treatment- others

- **Fissurectomy**
  Excision of fibrotic edge of fissure, curettage of base & excision of sentinel pile

- **Anal advancement flap**
  Recommended in patients with a low resting anal pressure
Beware...

- Recurrent/ resistant fissures
- Multiple fissures
- Low pressure fissures

Suspect:
- Cancer
- Crohn’s
- Perianal sepsis
ANAL FISSURE
SUPPORT FORUM
Rectal prolapse
Rectal prolapse

- Complete eversion of rectum thro’ anal canal
- Frequently associated with incontinence
- Elderly women (M:F= 1:7)
- Parity/ lax pelvic floor/ redundant sigmoid
- Examine on commode to elicit prolapse
- Assess pelvic floor & left colon
- Abdominal/ perineal procedures
Fistula in ano
Fistula in ano

- A track, lined by granulation tissue between anal canal/rectum and perianal skin

- Cryptoglandular sepsis

- Usually results from anorectal abscess, inadequately drained or ruptured spontaneously

- Results in recurrent perianal sepsis
Classification of Fistula in ano

- Intersphincteric sepsis
- Commonest intersphincteric (45%)
- In high fistulae, rule out intra abdominal pathology e.g. Crohn’s
- Clinical examination vital to assess int/ ext opening, primary & secondary tracts
Fistula in ano

O/E:

The “cheese grater” analogy
Investigations

- Careful EUA
- Flexible sigmoidoscopy
- MRI pelvis – complex or recurrent fistula for road map
- CT/ MR abdomen- if supralevator pathology suspected
Treatment

- Laying open
- Seton
- Combination
- Staged repair

- Fibrin glue
- Fistula plug

Variable results: Better for short tracks
Is this a fistula?
Hidradenitis suppurativa

- Chronic relapsing inflammation of apocrine glands
- Multiple fistulae
- Recurrent perianal sepsis
- Affects groins, perineum and axillae
- Association with Crohn’s disease
- Stop smoking/ reduce weight
- Antibiotics/ Retinoids/ ? Steroids
- Conservative surgical approach d/t recurrence
Pilonidal disease

• (Latin *pilo*: hair; *nidal*: nest)
• Affects natal cleft
• “Jeep bottom”
• Ingrowing hair
• Recurrent sepsis
• Conservative management
• Surgical management
Pruritis ani
Pruritis ani (Perianal itch)

- Difficult problem
- Causes ranging from anorectal to dermatological conditions
- Idiopathic pruritis ani
- May be associated with minor faecal incontinence
- Good history & exam to find likely cause of leakage
Pruritis ani - Causes

- **Neoplasia**
  - Polyps
  - Rectal/ anal cancer
  - Paget’s disease

- **Benign anorectal conditions**
  - Haemorrhoids
  - Fistula in ano
  - Fissure in ano
  - Rectal prolapse
  - Anal sphincter dysfunction

- **Infections**
  - Condyloma acuminatum
  - Herpes simplex
  - Candida albicans
  - E. vermicularis (Threadworm)

- **Dermatological**
  - Contact dermatitis
  - Psoriasis
  - Lichen simplex

- **Idiopathic**

**Diagram**

- Polyp
- Pus
- Parasite
- Psyche
Pruritis ani- Treatment

• Difficult to manage
• According to cause
• Aims should be to-
  reduce leakage
  good personal hygiene
  prevention of further insult to perianal skin
• May require dermatological input
Anal cancer
Anal cancer

- Rare - about 4% of colorectal malignancies
- ? Incidence rising
- 80% squamous cell carcinomas; 10% adenocarcinomas
- M < F
- H/o genital warts increased RR of anal cancer (27-fold in men, 22-fold in women)
Anal cancer - Clinical picture

• Premalignant lesions (AIN I-III): hyperkeratosis/irregular pigmentation in flat/raised lesions
• Pain & bleeding
• Lump
• Anovaginal fistula
• Inguinal lymphadenopathy
Anal cancer - Management

Investigations:
- EUA + Biopsies
- MRI Pelvis
- Staging CT chest/ abdomen/ pelvis

Treatment:
Chemoradiotherapy; Salvage surgery

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AIN I & II: observe 6 monthly
AIN III: Local excision (10% develop into invasive cancer in 20 years); extensive lesions: 3 monthly FU
Case study
• 31 yo woman with PR bleeding and pain
• Seen in General Surgical clinic
• Very tender on DRE
• Presumptive diagnosis of fissure- commenced on 2% Diltiazem
• OP review 6/52- patient DNA
• New referral to colorectal surgeon in 2/12
'If you don't put your finger in it, you'll put your foot in it'