ACG Clinical Guidelines: Management of Benign Anorectal Disorders

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Dyssynergic Defecation (DD)

Impaired rectal evacuation with abnormal anorectal testing & **recurring constipation**

- Pathophysiology:
  - Inadequate rectal propulsive forces
  - Increased outlet resistance due to impaired relaxation or paradoxical contraction of the external anal sphincter and/or puborectalis muscle
  - Reduced rectal sensation
  - Structural deformities
- Associated Conditions: IBS, anxiety, depression, surgery, hospitalization, eating disorders, trauma, and physical or sexual abuse
- Clinical Features: hard stools, excessive straining, use of manual maneuvers to aid evacuation, and a sense of incomplete evacuation

Diagnostic Testing

Rectal Balloon Expulsion (BET)

Measures time required to **evacuate a balloon** filled with **50 mL** warm water in the seated position.

- **Upper limit of normal is 1 minute**
- ~ 88% sensitive and specific

Anorectal Manometry (ARM)

Measures rectal sensation and **anorectal pressures** at rest, contraction, evacuation, and cough/Valsalva.

- Evacuation studies: incl. rectal & anal pressures, anal relaxation, and the rectoanal gradient

>70% concordance

Barium / MR Defecography

Evaluates puborectalis relaxation (normal response) or **contraction** (abnormal response) using rectal injection of thickened barium or gel.

- Lateral images obtained at rest, contraction, and defecation with the angle measured between axes of the rectum and anal canal
- May identify other structural abnormalities

Anal EMG

Measures anal muscle response/electrical activity via electrodes mounted on an acrylic anal plug or taped to the perianal skin

- **Normal is a reduction of > 20%** in anal EMG activity **during evacuation**
- May be used to diagnose and as part of DD treatment during biofeedback

Treatment

Conservative:

- Eliminate exacerbating medications
- Soluble fiber/laxatives for hard stools
- Insoluble fiber for loose stools
- Regular toileting, use of a footstool
- 500 Kcal meals to induce gastrocolic response
- Meds: laxatives, secretory agents, serotonin $5HT_4$ agonists

Anorectal biofeedback:

- Education on anatomy and dysynergia
- Correction of toileting position & behavior
- Abdominal breathing technique
- **Manometric-based guiding of rectal pressure generation & anal relaxation with visual feedback** from pressure tracings
- Balloon expulsion retraining for simulated defecation
- Sensory retraining with inflated balloon

Surgery:

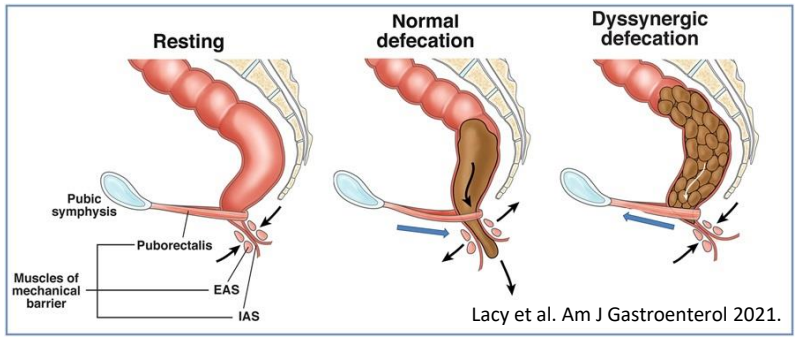
- Consider if prior treatments are ineffective & a structural abnormality is seen on defecography

** Caution: structural abnormalities occur commonly in asymptomatic patients **

- **Surgical restoration ≠ restoration of function**
  - Exceptions:
  - Overt rectal prolapse
  - Symptomatic, sizeable, non-emptying rectocele

Wald A, Bharucha AE, Limketkai B, Malcolm A, Remes-Troche JM, Whitehead WE, Zutshi M. ACG Clinical Guidelines: Management of Benign Anorectal Disorders. Am J Gastroenterol. 2021 Oct 1;116(10):1987-2008. doi: 10.14309/ajg.0000000000001507. PMID: 34618700.

Evaluation for & Treatment of Dyssynergic Defecation



Lacy et al. Am J Gastroenterol 2021.

Symptoms suggestive of DD

Conservative management, especially with normalization of stool form

Inadequate response

Good response

Continue conservative management

Anorectal testing: BET, ARM, Defecography, and/or Anal EMG

Not dysynergia

Manage symptomatically, review compliance
- **Consider IBS dx**
- **Consider transit study**

Dyssynergia

Anorectal Biofeedback

Success

Failure

Continue conservative management

Normal

Barium or MR Defecography

Structural abnormality

Consider surgery

Dyssynergia, no structural abnormality

Consider repeat biofeedback therapy

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Proctalgia Syndromes

Recurring episodes of **anorectal pain** in the absence of other known causes of pain (e.g. chronic prostatitis-men or chronic pelvic pain syndrome-women)

Chronic proctalgia: **pain lasting ≥ 20 mins**

- Pathophysiology: due to excessive tension on pelvic floor muscles
- Clinical Features: tenderness of the levator ani muscle on DRE may be present or absent
  - Levator ani syndrome
  - Chronic idiopathic proctalgia syndrome
- Treatment:
  - ARM or BET for patients with levator ani syndrome to identify patients who may benefit from **biofeedback therapy**

Acute Proctalgia: **pain lasting < 20 mins**

- Pathophysiology: unknown
- Clinical features: normal DRE
- Treatment: **explanation & reassurance**

Anal Fissures

Ulcer-like **longitudinal tear** in the **midline** of the **anal canal** distal to the dentate line

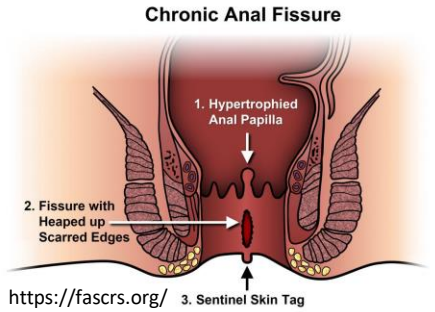
- 90% posterior midline
- Lateral position tear: consider Crohn's, TB, Syphilis, HIV, Psoriasis, Anal cancer
- Clinical features: **pain during & often after defecation**
  - +/- minimal bright red blood on the toilet tissue

Acute – simple tear in the endoderm

- Treatment:
  - Sitz baths + fiber
    +/- topical anesthetics or anti-inflammatory ointments

Chronic – lasting > 8-12 weeks

- Accompanying features: skin tag +/- hypertrophied anal papilla
- Treatment:
  - **Topical/oral CCB or topical nitrates**
  - If refractory:
    - Botulinum A toxin
    - Lateral internal sphincterotomy
    - Pneumatic balloon dilation



https://fascrs.org/

Hemorrhoids

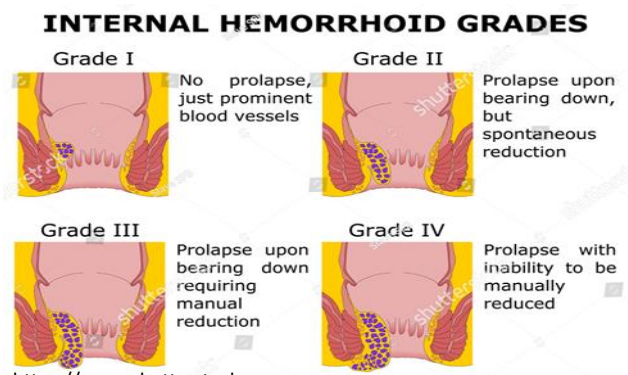
Vascular tissue covered with anal mucosa – **anal cushions** – that enlarge and **protrude** into the anal canal

Clinical features:

- Internal: **painless bleeding** with BMs & an intermittent protrusion
- External: **painful swelling**
- Anal skin tags: painless, redundant skin from prior hemorrhoid

Treatment:

- Bowel management: 6-8 glasses of fluids/day, dietary fiber intake (20-30 g/day), avoid prolonged toilet sitting
- Grade 1 and 2: **rubber band ligation**, infrared coagulation, bipolar coagulation, and sclerotherapy
- Grade 3: ligation + **hemorrhoidopexy / mucopexy** or a **stapled hemorrhoidectomy**
- Grade 4: hemorrhoidectomy
- Thrombosed external hemorrhoids: surgical excision if seen within 4 days



https://www.shutterstock.com

Fecal Incontinence (FI)

Involuntary loss of solid or liquid feces

Diagnostic assessment:

- Characterize BMs: bowel diary & Bristol stool scale
- DRE: perform at anorectal rest, contraction, and evacuation

Treatment:

- Conservative:
  - Education
  - Antidiarrheal drugs
  - **Pelvic floor exercises daily**
- Biofeedback:
  - **Improve strength and coordination of the external anal sphincter** without contracting abdominal wall muscles
  - Improve rectal sensation
- If refractory to above:
  - Barrier devices: anal plugs, vaginal balloons
  - Injectable bulking agents
  - Sacral nerve stimulation
  - Anal sphincteroplasty
- **Severe FI refractory to ALL other therapy: end stoma**

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