Common Benign Anorectal Disorder

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- Anorectal Fistula & Abscess
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- Defecation Disorders
- Proctalgia Syndrome
- Faecal Incontinence
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Haemorrhoids

Haemorrhoids: Cushions of vascular tissue (sinusoids) in the anal canal

Contribute 15–20% of resting anal pressure; protect sphincter during defecation

Location:

- Left lateral
- Right anterolateral
- Right posterolateral

Types:

Internal: Proximal to dentate line, columnar epithelium, painless unless thrombosed

External: Distal to dentate line, anoderm-covered, painful when thrombosed

Skin Tags: Painless fibrotic remnants of thrombosed external haemorrhoids

Aetiology :

- **Pathogenesis :**

  Vascular congestion + mucosal prolapse

Contributing Factors:

Straining

Increased intra-abdominal pressure

Aging-related structural weakening

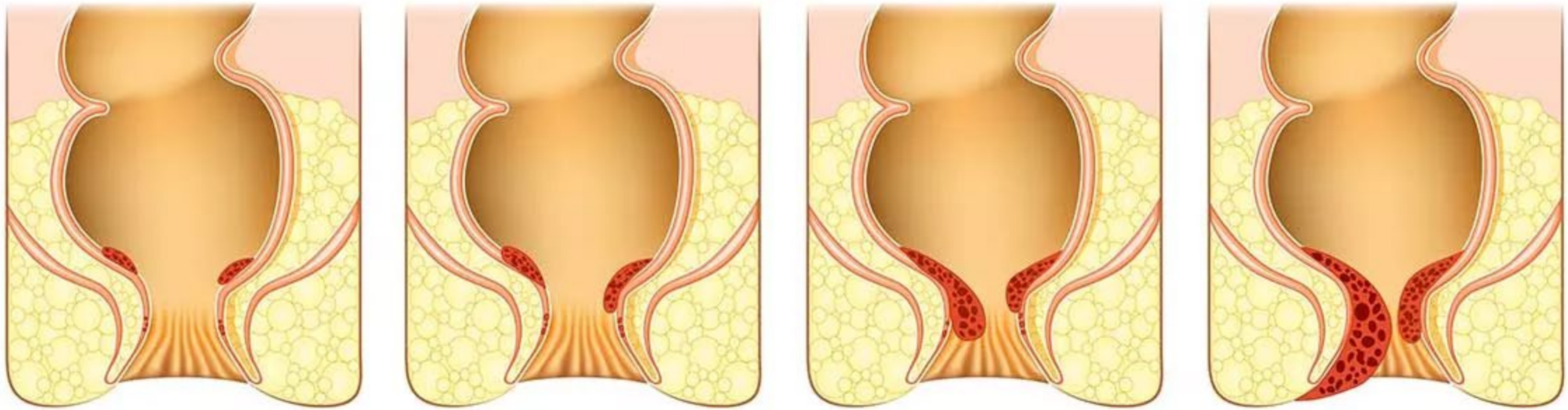
Anal Resting Pressure: Elevated in haemorrhoid patients

Clinical Presentation :

- **Internal Haemorrhoids:**
  - Painless bright red bleeding
  - Prolapse
- **Thrombosed External Haemorrhoids:**
  - Severe pain due to anoderm innervation
- **Cancer Risk:** No increased risk associated with haemorrhoids

URGENT CARE
+TeleHealth

Types of Internal Hemorrhoids



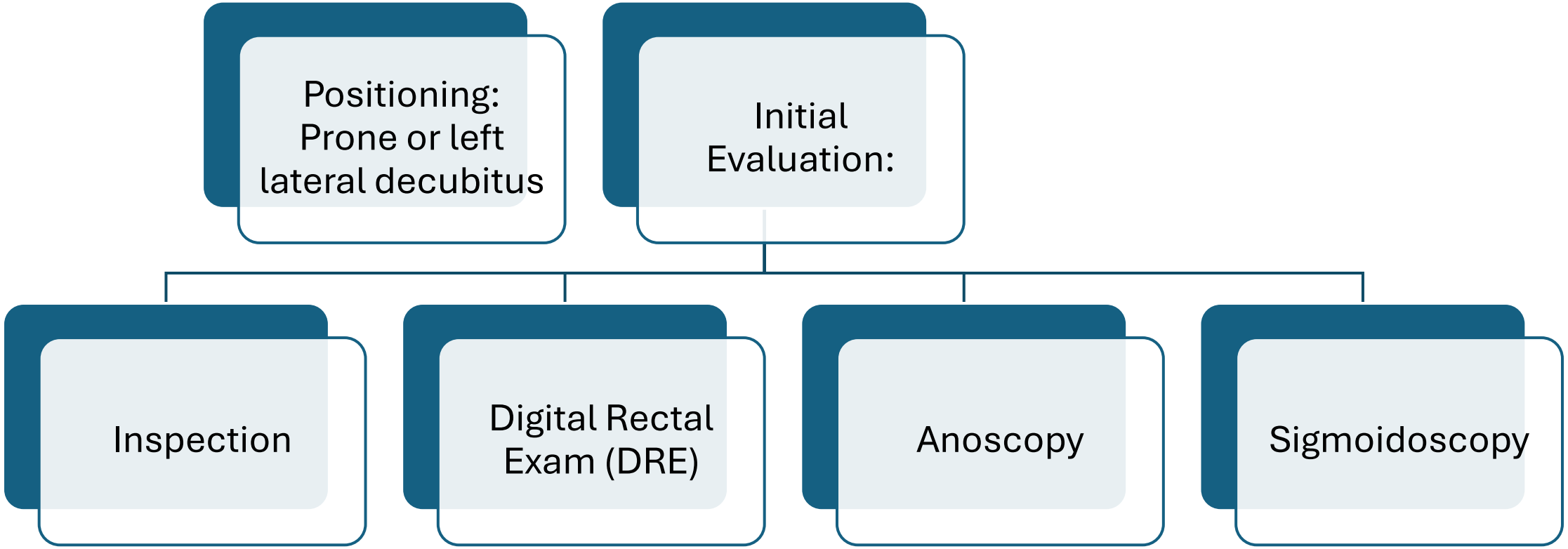
Grade I
(no prolapse, just prominent blood vessels)

Grade II
(prolapse upon bearing down, spontaneous reduction)

Grade III
(prolapse upon bearing down, requiring manual reduction)

Grade IV
(prolapse with inability to be manually reduced)

Diagnostic Approach :



Treatment Overview :

Thrombosed External Hemorrhoids:

- Excision within 72–96 hours if painful
- Conservative if symptoms subside

Conservative Management:

- Dietary fiber (20–30 g/day)
- Sitz baths (2–4x/day)
- Topical agents/suppositories
- Phlebotonics (e.g., flavonoids)
- Behavior modification

Office-Based Procedures

Procedure	Indication	Notes
Rubber Band Ligation	Grade I–III	Most effective;
Sclerotherapy	Grade I–III	Safe retreatment; frequent recurrence
Thermotherapy	Small bleeding hemorrhoids	Infrared, electric, laser, ultrasonic

Surgical Procedures

Indications: Large Grade III/IV, mixed types, failure of office procedures

Options:

- Traditional Hemorrhoidectomy
- Stapled Hemorrhoidopexy (PPH)
- Doppler-Guided Ligation
- Ultrasonic Scalpel / Bipolar Devices

Pain Management Post-op:

- Topical diltiazem
- Topical baclofen

Anal Fissures :

Definition :

Anal Fissure: Longitudinal tear in the anoderm, distal to the dentate line

Chronic Fissure: Persists >6–8 weeks; features include:

- Ulceration with heaped-up edges
- Exposed internal sphincter Fibers
- Sentinel skin tag and/or hypertrophied anal papilla

Location Distribution:

- Posterior midline: ~90%
- Anterior midline: 10–15%
- Lateral: <1% (suggests atypical aetiology)

Differential Diagnosis (Atypical Locations)

Consider in lateral/multiple fissures:

- Crohn’s disease (most common)
- Ulcerative colitis
- Syphilis
- Tuberculosis
- HIV
- Leukaemia
- Anal carcinoma

Clinical Presentation

Pain: Severe tearing pain during defecation (spasm-related)

Bleeding: Bright red blood on toilet paper (haematochezia)

Spasm: Internal sphincter contraction exacerbates pain

Impact: Most common cause of severe anorectal pain

Diagnostic Approach :

History & Physical Exam:

Gentle buttock separation may reveal fissure

DRE/anoscopy often intolerable without anaesthesia

Colonoscopy: Indicated for multiple or lateral fissures (rule out Crohn's disease)

Key Consideration: Avoid aggressive manipulation in acute phase

Pathophysiology :

Ischemia Hypothesis :

Posterior midline has reduced perfusion

Internal sphincter spasm worsens ischemia

Cycle:

Pain → sphincter contraction → ↑ anal pressure → ↓ blood flow → poor healing

Resting Anal Pressure: Elevated in chronic fissure

Medical Management :

Goal: Break pain-spasm-ischemia cycle

Conservative Measures:

Psyllium Fiber , Sitz baths

Avoid straining and prolonged toilet time

Topical Agents:

GTN Ointment (Nitro-glycerine):

Diltiazem 2% / Nifedipine 0.5% Ointment:

Botulinum Toxin A:

Temporary sphincter paralysis , Healing rates 60–70%

Used for refractory or recurrent fissures

Side effect: transient incontinence

Surgical Management :

Indications: Failure of medical therapy or chronic fissures >8–12wk

Lateral Internal Sphincterotomy (LIS):

Procedure of choice

Superior to manual dilation

Risk: Minor incontinence (1.2–35%), major (2–3%)

Alternatives:

Controlled Pneumatic Balloon Dilation

Anal Advancement Flap / V-Y Plasty (for low-pressure or complex cases)

Special Considerations :

Crohn’s Disease:

Initial treatment:

Sitz baths, metronidazole, infliximab

LIS used cautiously due to risk of poor healing and fistula formation

Anorectal Fistulas and Abscesses

Definitions :

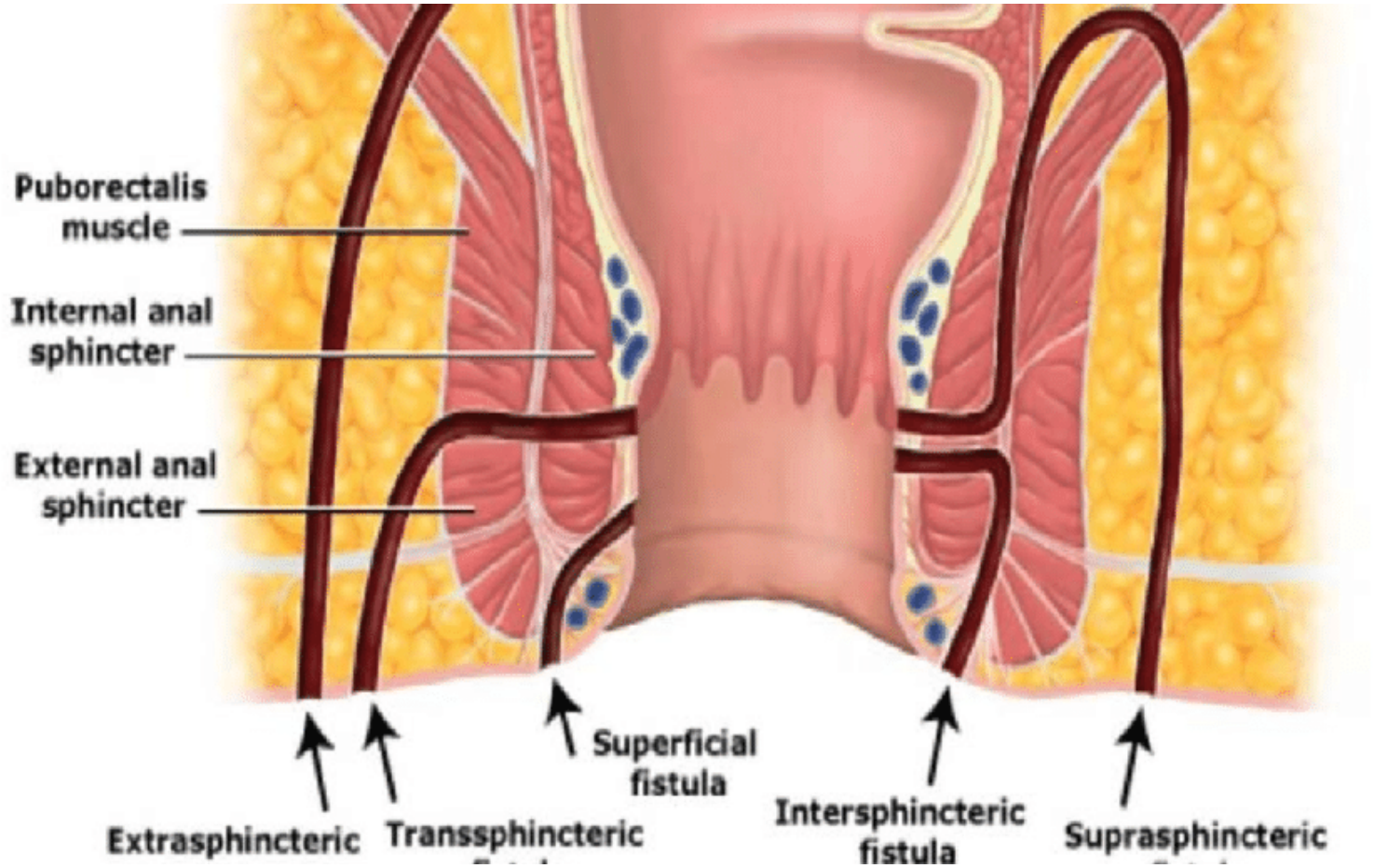
Anal Abscess: Acute infection of anal glands → localized purulent collection

Anal Fistula (Fistula-in-ano): Chronic tract between anal canal and perianal skin

Aetiology:

- Majority originate from infected anal glands
- May be associated with Crohn’s disease, proctitis, malignancy

Classification of Anal Fistulas(Parks System)



Clinical Presentation

Abscess:

- Acute perianal pain
- Swelling, erythema
- Fever, systemic signs

Fistula:

- Persistent drainage (pus, blood)
- Pain with defecation or intercourse
- Swelling, pruritus, diarrhea
- May indicate underlying Crohn’s disease or malignancy

Diagnostic Evaluation

Physical Exam:
- External opening, induration, drainage
- Bidigital palpation (cord-like tract)

Goodall's Rule:
- Anterior openings → direct tract
- Posterior openings → curved tract to midline

Endoscopy: May reveal internal opening

Imaging Modalities:
- **MRI with endoanal coil:** Gold standard for complex/recurrent disease
- **Endoanal Ultrasound (EUS):** Accurate, cost-effective, but limited by pain/stricture

Other Techniques:
- Probe passage, dye injection, Fistulography

Culture: Reserved for atypical infections or immunocompromised patients

Management of Anal Abscesses

Primary Treatment: Prompt surgical drainage

Superficial Abscesses:

- Outpatient drainage under local anesthesia
- Avoid packing

Deep/Sphincter-Involving Abscesses:

- OR drainage recommended

Antibiotics:

Not routinely indicated post-I&D

Consider for systemic infection, immunosuppression, or HIV

May reduce fistula formation rates

Management of Anal Fistulas :

Goals: Eradicate tract, preserve continence

Surgical Options:

Fistulotomy:

- For simple intersphincteric tracts
- Success >90%; incontinence risk 8–42%

Seton Placement:

- For high trans/suprasphincteric tracts
- Gradual division with fibrosis
- Recurrence 2–8%; incontinence ~60% (mostly flatus)

Advancement Flap Repair:

- For complex or Crohn’s-related fistulas
- Preserves sphincter integrity

Management of Anal Fistulas :

Fibrin Glue:

Minimally invasive; variable success (30–85%)

High recurrence (up to 59%)

Biodegradable Collagen Plug:

Repeatable, sphincter-sparing

Inconsistent closure rates

Muscle-Preserving Techniques:

LIFT, plug, glue

For >60% sphincter involvement or high incontinence risk

Crohn’s Disease Considerations

Challenges: Poor healing, high recurrence, incontinence risk

Initial Management:

- Sitz baths
- Metronidazole
- IV infliximab

Surgical Intervention:

LIS used cautiously

Prefer sphincter-sparing techniques

Pruritus Ani

- **Definition & Epidemiology**

  Symptom complex—not a disease

  Unpleasant cutaneous sensation → urge to scratch

  Prevalence:

  Affects 1–5% of adults

  More common in men

  Pathophysiology:

  Scratching → maceration → superinfection → epidermal hypertrophy → lichenification

Aetiology :

Idiopathic: >50% of cases

Anorectal Diseases: Fissures, fistulas, haemorrhoids, prolapse, skin tags

Systemic Diseases: DM, RF, IDA, hematologic malignancies

Dermatologic Conditions: Psoriasis, seborrheic dermatitis, lichen planus

Infections: Pinworms, fungi, bacteria, STIs

Gynaecologic: Vaginitis, endocervicitis

Neoplasms: Paget's disease, SCC, cloacogenic carcinoma

Hygiene: Poor or excessive cleansing, perfumed products

GI Disorders: Crohn's, UC, IBS

Diagnostic Evaluation:

History & Physical Exam:

Inspection, palpation, anoscopy

Additional Tests:

Fungal scrapings

Perianal skin biopsy (if suspicious or severe)

Sigmoidoscopy/colonoscopy (if IBD or neoplasm suspected)

STI testing (for receptive anal intercourse)

Management Principles

Goal (Idiopathic Cases):

- Keep perianal skin clean, dry, slightly acidic
- Avoid alkaline soaps and aggressive cleansing

Conservative Measures:

- No scratching/rubbing
- Wash with water only; pat dry or use cool hair dryer
- Use unscented soap for bathing
- Loose cotton underwear
- Sitz baths (no additives)
- Maintain soft, bulky stool
- Eliminate dietary triggers

Medical Therapies

Topical Corticosteroids:

Hydrocortisone 0.5–1.0% ointment

Oral Agents:

Sedating antihistamines or TCAs (for nighttime symptoms)

Refractory Cases:

Topical capsaicin 0.006% (compounded)

Tacrolimus 0.1% ointment

Referral:

Dermatology consult for intractable or complex cases

Defecation Disorders (DDs)

Definition & Epidemiology

- **Definition:**
  Difficulty evacuating stool from rectum
  Requires symptoms and anorectal testing for impaired evacuation
- **Epidemiology:**
  More common in women
  Peaks: 20–29 and 80–89 years (women); increases with age in men

Pathophysiology

Maladaptive sphincter contraction

Inadequate rectal propulsion and/or outlet resistance

Paradoxical contraction of external anal sphincter/puborectalis

Coexisting Abnormalities:

↓ Rectal sensation

Structural deformities

Delayed colonic transit (up to 50%)

Complication & Association of DD

Complications of Straining:

- Intussusception
- Solitary rectal ulcer syndrome
- Pudendal neuropathy

Associated Conditions:

- IBS, anxiety, depression, trauma, eating disorders, Parkinson’s, IBD

Note: Obstetric trauma not associated

Clinical Features :

- ✓ Infrequent defecation
- ✓ Hard stools
- ✓ Excessive straining
- ✓ Sense of anorectal blockage
- ✓ Manual maneuvers to facilitate defecation
- ✓ Incomplete evacuation

Diagnostic Assessment :

Digital Rectal Exam (DRE):

Balloon Expulsion Test (BET):

Normal: <1 min (commercial balloon), <2 min (Foley catheter)

Anorectal Manometry (ARM): Measures pressures, rectal sensation

Defecography (Barium/MRI):

Assesses puborectalis function, perineal descent, rectoceles, prolapse

Anal EMG :

Colon Transit Study:

For refractory cases or normal anorectal function

Radiopaque markers, scintigraphy, wireless capsule

Conservative Treatment :

Lifestyle & Diet:

- Eliminate constipating medications
- Soluble Fiber (psyllium, Sterculia) for hard stools
- Regular toileting, avoid straining

Pharmacologic Adjuncts:

- Osmotic/stimulant laxatives
- Enemas/suppositories

Treat Coexisting Conditions:

Fissures, symptomatic haemorrhoids

Biofeedback Therapy (Cornerstone)

Goals:

Improve coordination of abdominal and pelvic floor muscles

Components:

Education (anatomy, dyssynergia, recto-anal gradient)
Correct toileting posture (footstool, lean forward, limit time)
Abdominal breathing
Manometric/EMG feedback (generate rectal pressure, anal relaxation)
Rectal sensory retraining (for hyposensitivity)
Balloon expulsion retraining

Surgical & Minimally Invasive Options

General Principle:

Structural abnormalities common in asymptomatic patients

Surgery may not restore function

Rectal Prolapse :

Full-thickness prolapse → laparoscopic rectopexy (posterior/ventral)

Rectocele : Surgery for symptomatic bulging or non-emptying >5 cm

STARR Procedure: European alternative for rectovaginal reinforcement

Sigmoidocele/Enterocele:

Surgical repair (Sacro-colpopexy) with urogynaecology input

Botulinum Toxin A: For dyssynergia without structural abnormality

Summary :

- ❑ Defecation disorders require symptom and test-based diagnosis
- ❑ DRE and anorectal testing are essential
- ❑ Biofeedback therapy is first-line and highly effective
- ❑ Surgery reserved for structural abnormalities with significant symptoms
- ❑ Multidisciplinary approach improves outcomes

Proctalgia Syndromes

Definitions :

Recurrent anorectal pain without identifiable cause.

Subtypes:

Chronic Proctalgia Syndrome:

Pain ≥20 minutes (often hours/days)

Levator Ani Syndrome:

Chronic pain with levator ani tenderness on DRE

Chronic Idiopathic Proctalgia:

Chronic pain without levator tenderness

Proctalgia Fugax (PF):

Sudden, intense rectal pain lasting seconds to <20 minutes

Pathophysiology :

Chronic Proctalgia:

Excessive pelvic floor muscle tension (levator ani, puborectalis)

Overlap with chronic pelvic pain syndromes and prostatitis

Proctalgia Fugax:

Unknown aetiology

Rare congenital variant:

internal anal sphincter thickening, elevated resting pressure

Diagnostic Approach :

General Principle: Diagnosis of exclusion

Chronic Proctalgia:

DRE: Assess levator ani tenderness

ARM and BET: Identify dyssynergia and biofeedback candidates

Proctalgia Fugax:

Diagnosis based on history and normal DRE

Coexisting anorectal conditions (e.g., fissures, hemorrhoids) do not exclude PF

Management – Chronic Proctalgia :

Patient Education:

Reassure benign nature of condition

Reduce anxiety and catastrophizing

Initial Therapies:

Warm sitz baths , Fiber supplementation

Mild analgesics , Muscle relaxants

Biofeedback Therapy:

Strong recommendation for levator syndrome with abnormal ARM

Reconditions pelvic floor coordination

Electrogalvanic Stimulation: Alternative if biofeedback unavailable

Management – Proctalgia Fugax :

Patient Reassurance:

Explain benign, self-limited nature

No long-term sequelae

Treatment:

No proven interventions due to brevity of episodes

Salbutamol Inhalation:

Anecdotal benefit; not reproducible or endorsed

Faecal Incontinence (FI)

Definition & Epidemiology

FI: Involuntary loss of solid or liquid faeces

Anal Incontinence: Includes involuntary flatus

Prevalence:

2.2–25% in adults

Up to 50% in nursing homes

Risk Factors:

Age, diarrhoea, urgency, constipation, urinary incontinence

Obstetric anal sphincter injury

CNS/PNS diseases, IBD, systemic illness

Types of Faecal Incontinence :

Type	Features
Urge Incontinence	Awareness of need to defecate but unable to reach toilet in time
Passive Incontinence	No awareness before leakage; low resting pressures
Sleep Incontinence	Rare; seen in diabetes, scleroderma, isolated internal sphincter weakness

Diagnostic Assessment :

Clinical Evaluation & Physical Exam:

Bristol Stool Form Scale

Bowel diaries (frequency, urgency, leakage type)

Rectal masses, sphincter tone, pelvic floor motion

Perianal pinprick, anal wink reflex (sacral LMN integrity)

Further Testing (if refractory):

ARM: Resting/squeeze pressures, rectal sensation

BET: Balloon expulsion time

Endoanal US: Internal sphincter

MRI: External sphincter tears/scars

Conservative Management :

Education:

Diarrhoea and constipation as contributors

Diet & Medications:

Antidiarrheals: Loperamide, diphenoxylate, bile salt binders

Fiber supplements/laxatives for constipation

Low FODMAP diet for urgency

Behavioural Strategies:

Daily pelvic floor exercises

Scheduled toileting

Bowel diary

Barrier creams, pads

Biofeedback Therapy :

Mainstay Treatment:

- Strengthens external anal sphincter
- Improves rectal sensation

Tailored Approach:

- Based on ARM findings and symptom profile

Limitations:

- Less effective in dementia, depression, short-term memory loss
- Requires patient motivation and reinforcement

Adjunctive & Minimally Invasive Therapies

Anal Plugs:

Mechanical barrier (Renew, Peristeen) , useful in select patients

Bulking Agents:

Dextranomer/hyaluronic acid injections

Promising results; ongoing comparisons with biofeedback

Radiofrequency Stimulation (SECCA):

Initial promise; poor long-term outcomes

Neuromodulation:

SNS: Approved for moderate-to-severe FI ,Trial phase → permanent implant

Improves symptoms/QoL; adverse events include pain, infection

PTNS/TTNS: Less invasive; PTNS superior to sham in some studies

Surgical Options :

Sphincteroplasty:

For acute obstetric or traumatic injuries

Good short-term results; long-term decline in continence

Graciloplasty & Artificial Sphincters:

High complication/explant rates

Not widely recommended

Stoma Creation (Colostomy/Ileostomy):

Last resort for refractory FI

Can significantly improve QoL

Patient reactions vary; requires thorough counseling

Sexually Transmitted Anorectal Conditions

General Overview :

Rising Prevalence: Often linked to anal receptive intercourse

Symptoms: Anal pain, tenesmus, urgency, purulent drainage, bleeding

Lesions : Ulcerations, vegetations, proctitis

Coinfection: Up to 41% in high-risk populations

STIs facilitate HIV transmission and alter disease course

Clinical Entities: Distal Proctitis: Gonorrhoea, Chlamydia, Syphilis, HSV

Proctocolitis: Entamoeba, Campylobacter, Salmonella, Shigella, CMV

Herpes Simplex Virus (HSV)

Epidemiology:

HSV-2: 45M infected; HSV-1 rising in anogenital lesions

Presentation:

Vesicles → ulcers; pain, pruritus, tenesmus, sacral paraesthesia

Friable mucosa with erosions/ulcers on proctoscopy

Diagnosis:

PCR or viral culture

Treatment:

Acyclovir, famciclovir, valacyclovir (7–10 days)

Human Papillomavirus (HPV) :

Epidemiology:

Most common STI in US , Linked to HIV and anal intercourse

Serotypes: 6, 11: Benign warts ,16, 18, 31: Dysplasia, AIN, cancer

Presentation:

Condyloma acuminatum, bleeding, discharge, hygiene difficulty

Management:

Biopsy for diagnosis

Surgical: Excision, cryotherapy, fulguration

Topical: Imiquimod, dichloroacetic acid

AIN: Screen with anal cytology; HPV vaccination recommended

Gonorrhoea :

Epidemiology: Resurgence, drug resistance

Often asymptomatic (84% in MSM)

Presentation: Pruritus, mucopurulent discharge, tenesmus

Diagnosis: Anal swab culture (gold standard)

Gram stain: GN diplococci

Treatment: Ceftriaxone 250mg IM + Azithromycin 1g PO

Doxycycline alternative (7 days)

Chlamydia :

Epidemiology: 3M cases/year; 53.5% rectal in MSM

Serotypes: D–K: Mild proctitis, often asymptomatic

L1–L3 (LGV): Severe proctitis, ulcerations, mimics Crohn’s

Diagnosis: PCR from rectal swab; biopsy for LGV

Treatment: LGV: Doxycycline 21 days

Non-LGV: Azithromycin 1g PO or Doxycycline 7 days

Syphilis :

Epidemiology: Increasing in MSM

Stages:

Primary: Chancre, painful anal ulcers

Secondary: Condylomata Lata, mucous patches, rash

Tertiary: Gummas

Diagnosis: Dark-field microscopy, VDRL/RPR, FTA-ABS, PCR

Treatment: Benzathine penicillin G 2.4M units IM

HIV-Associated Perianal Disease :

Common Lesions:

Condylomas, ulcers, haemorrhoids, fissures, abscesses, neoplasms

Wound Healing: Influenced by AIDS status, CD4+ count

Idiopathic Anal Ulcers: Broad-based, posterior midline, poor healing

Treatment: Intralesional steroids, surgical debridement

CMV Infection: CD4+ <100; ileo-colitis, toxic megacolon

MAC Infection: Watery diarrhoea, dehydration

Treatment: Clarithromycin + Ethambutol

Kaposi Sarcoma: Purple lesions, biopsy for diagnosis

Treatment: HAART, local/systemic chemotherapy

Summary :

STIs of the anus and rectum present with nonspecific symptoms

High index of suspicion required in at-risk populations

Diagnosis relies on targeted testing (PCR, biopsy, culture)

Treatment varies by pathogen; coinfection and HIV status influence management

Prevention: Safe practices, screening, HPV vaccination

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