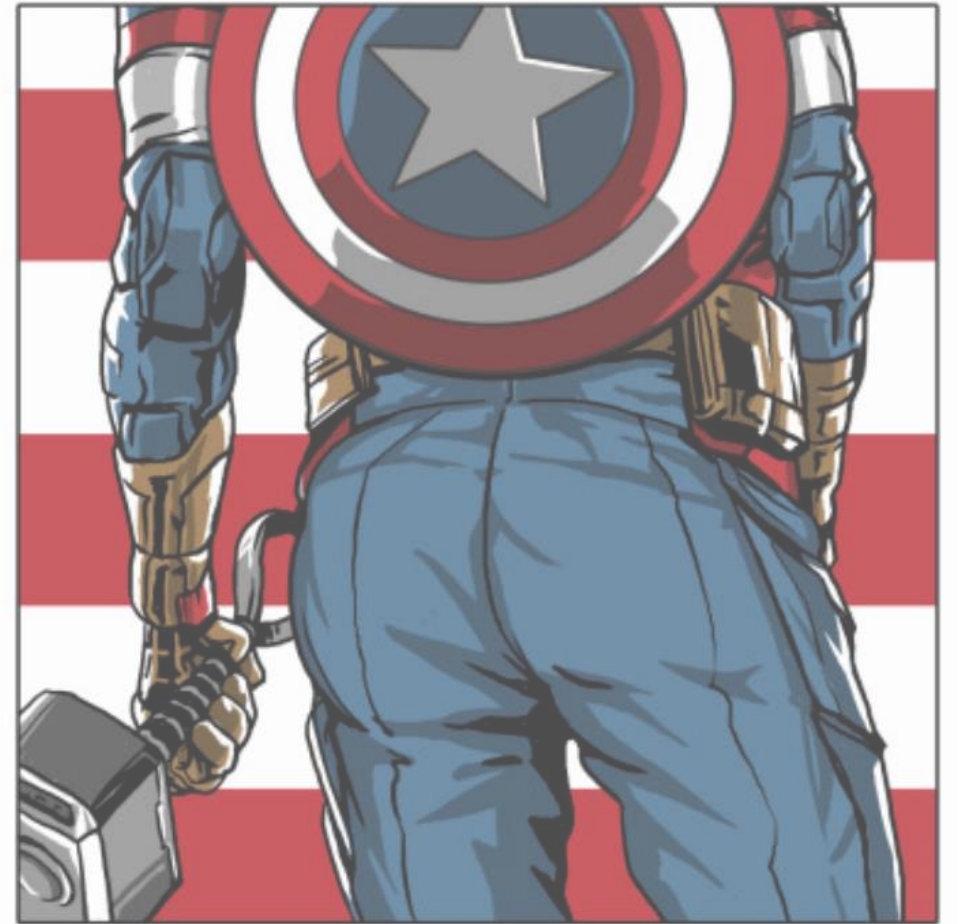


Anorectal and Perineal Problems in Pediatric Patients

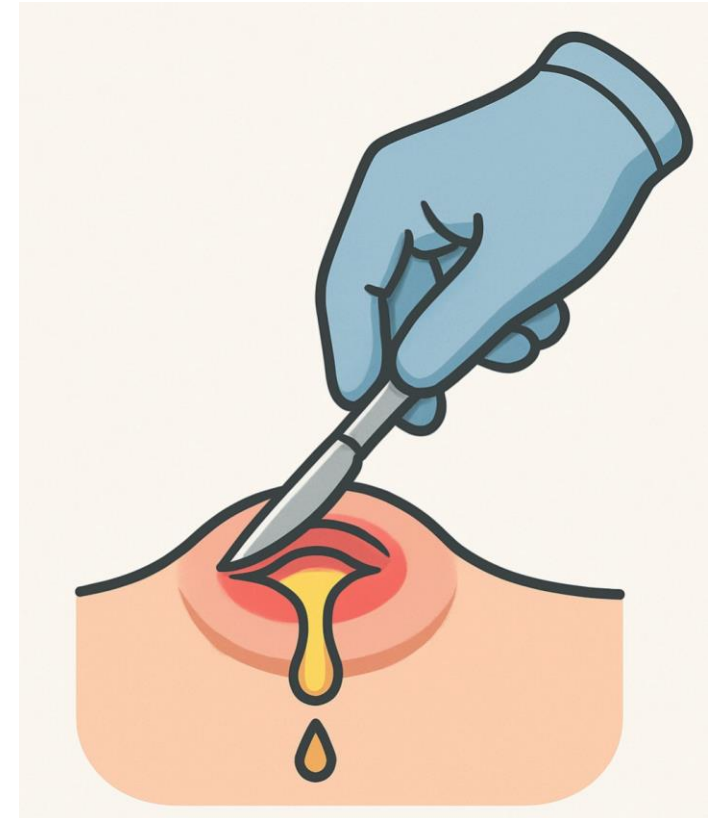
PMG Pediatric Conference for Primary Care
Providence St. Vincent Medical Center – Portland, Oregon
Alex Ruiz-Elizalde, MD
June 5th , 2026

- A review of diseases of the perineum, anus and rectum in pediatric patients
- Review of medical literature and
- Personal experience
- Please ask questions at any time
- Feel free to interrupt
- **No disclosures**



Perineal Abscess: Groin and buttock Abscess

- Superficial skin infection
 - Diaper rash - violation skin barrier
 - Does not communicate to rectum
 - Staphylococcus aureus
 - Can involve lymph nodes - necrotic
- Diagnosis
 - Clinical / physical exam
 - Ultrasound beneficial to assess need for drainage
 - Can rule out other pathology such as incarcerated hernia
 - Drainable collection vs cellulitis
 - Lymphangiomas (vascular malformations)



Incision and Drainage of Skin Abscess – General Surgery – HealthFees.org

Perineal Abscess: Groin and buttock Abscess

- Treatment
 - Antibiotics for cellulitis component if present
 - Aspiration may be unsuccessful
 - Requires incision and drainage (under anesthesia / sedation)
- Routine Packing of Simple Cutaneous Abscesses is Painful and Probably Unnecessary. O'Maller GF, Dominici P, et al. Academic Emergency Medicine. 2009
 - Prospective, randomized, single blinded trial
 - Cutaneous abscesses < 5 cm
 - Randomized to packing or no packing (48 subjects)
 - 48 hour follow up (dressing removed by blinded provider)

Perineal Abscess: Groin and buttock Abscess

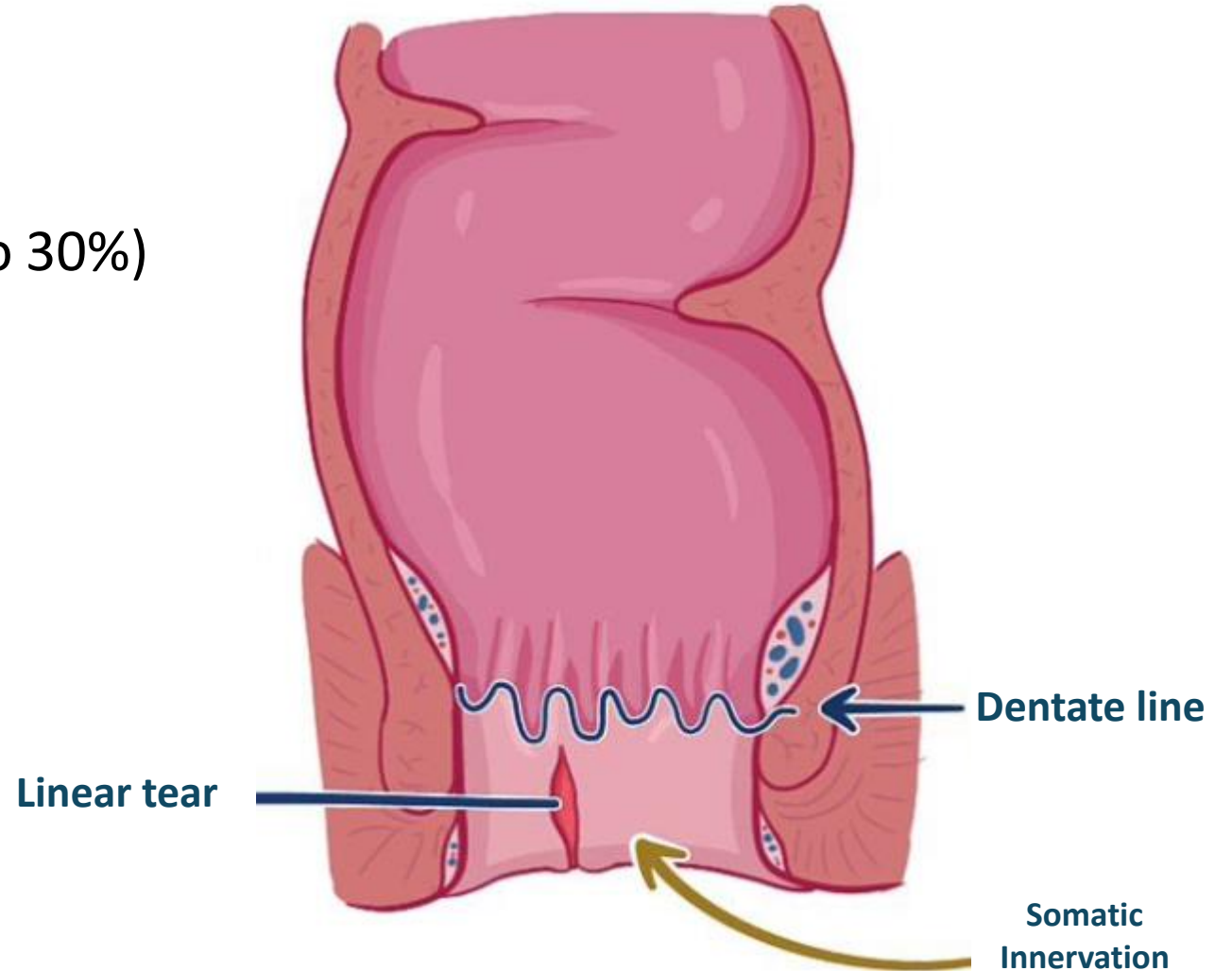
- Results
 - No difference in age, sex, location of abscess, and initial pain scores
 - No significant difference in second intervention need
 - Packed patient reported higher pain scores after initial procedure and at 48 hr
 - No clinical benefit packing
 - Increased opioid use
 - Routine packing is not necessary
-
- Should I pack?
 - If concerned about wound closing – use other alternative to packing
 - For bleeding concerns ONLY

Anal Fissures

- Tear in anal canal mucosa up to the dentate line. Presumed to be caused by hard stool passage. Hypertonicity of anal sphincter (adults)
- 6 months to 2 year of age (transition of food)
 - Pain on defecation
 - Bleeding (bright red)
 - Sentinel skin tag
- Medical treatment
 - Sitz bath
 - Constipation management (softeners, laxatives, nitroglycerin ointment)

Anal Fissures

- Surgical Management
 - Anal dilatation (recurrence of to 30%)
 - Injection of botulinum toxin
 - Lateral sphincterotomy
 - Fissurectomy



Fistula-in-ano

- Occurs due to an infection of the deep anal crypts along the dentate line
- Usual presentation involves a perianal abscess
 - 0.5% to 4.3% of all infants within the first year of life
 - 90% are males
 - No signs of systemic sepsis
 - Older patients – concerns for inflammatory bowel disease
 - Earliest I have seen 3-4 years of age
- Diagnosis
 - Physical exam
 - Blood work and sonography are not required or useful in most cases

Fistula-in-ano

- Medical management
 - Warm compresses
 - Antibiotics and observation
 - Most children will have spontaneous resolution
 - 87% of patients within a 5-month period
- Surgical management
 - No absolute consensus on timing
 - Significant discomfort – incision and drainage
 - Aspiration
 - Incision and drainage – 35% recurrence rate
 - Incision and drainage with FISTULOTOMY
 - Superficial fistula – damage to sphincter rare
 - Wound may take time to heal - parental expectations

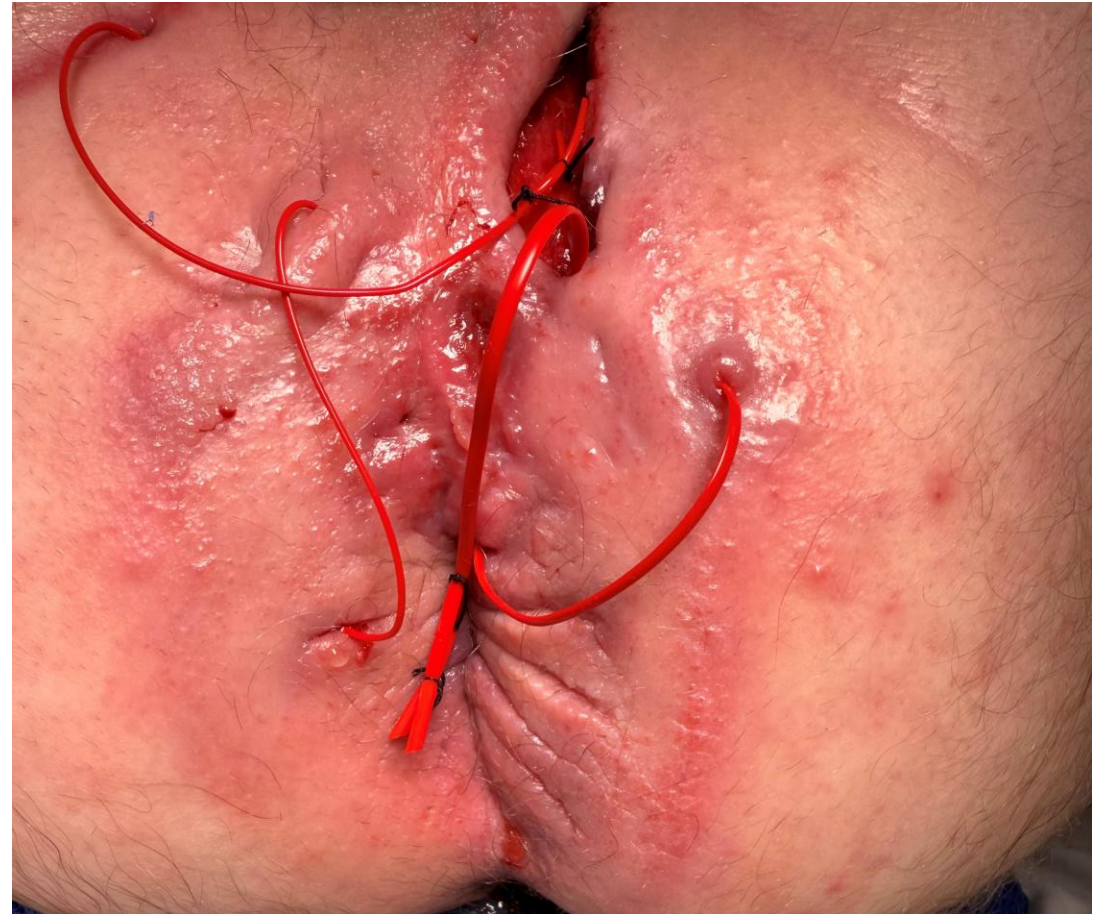


Perineal Crohn Disease

- Older patients and more severe disease
- Transmural inflammation with infection and fistulization
 - Penetrating disease
- Patients may be immunocompromised
- Complex fistulae
 - Multiple tracts
 - Transsphincteric and external sphincter involvement

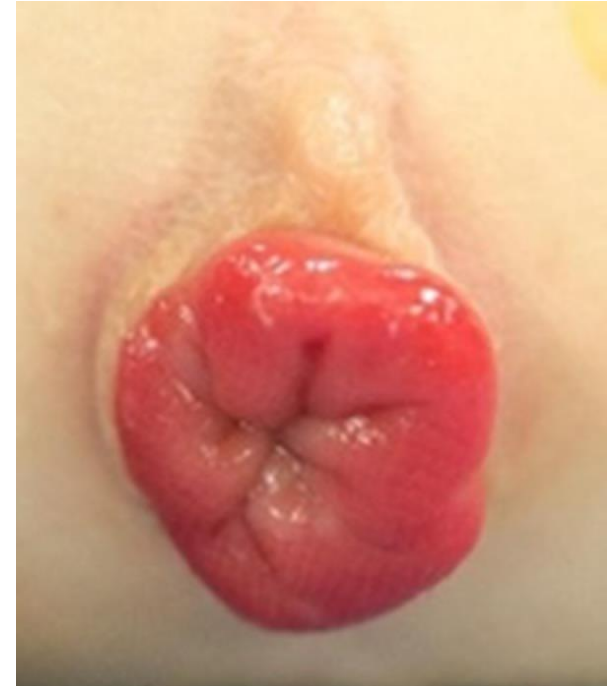
Perineal Crohn Disease

- Medical management
 - First line treatment
 - Biologics
 - Temporizing and control
- Surgical management
 - Symptom relief
 - Seton
 - Abscess drainage
 - Washouts
 - No good operation
 - Pathologic remission



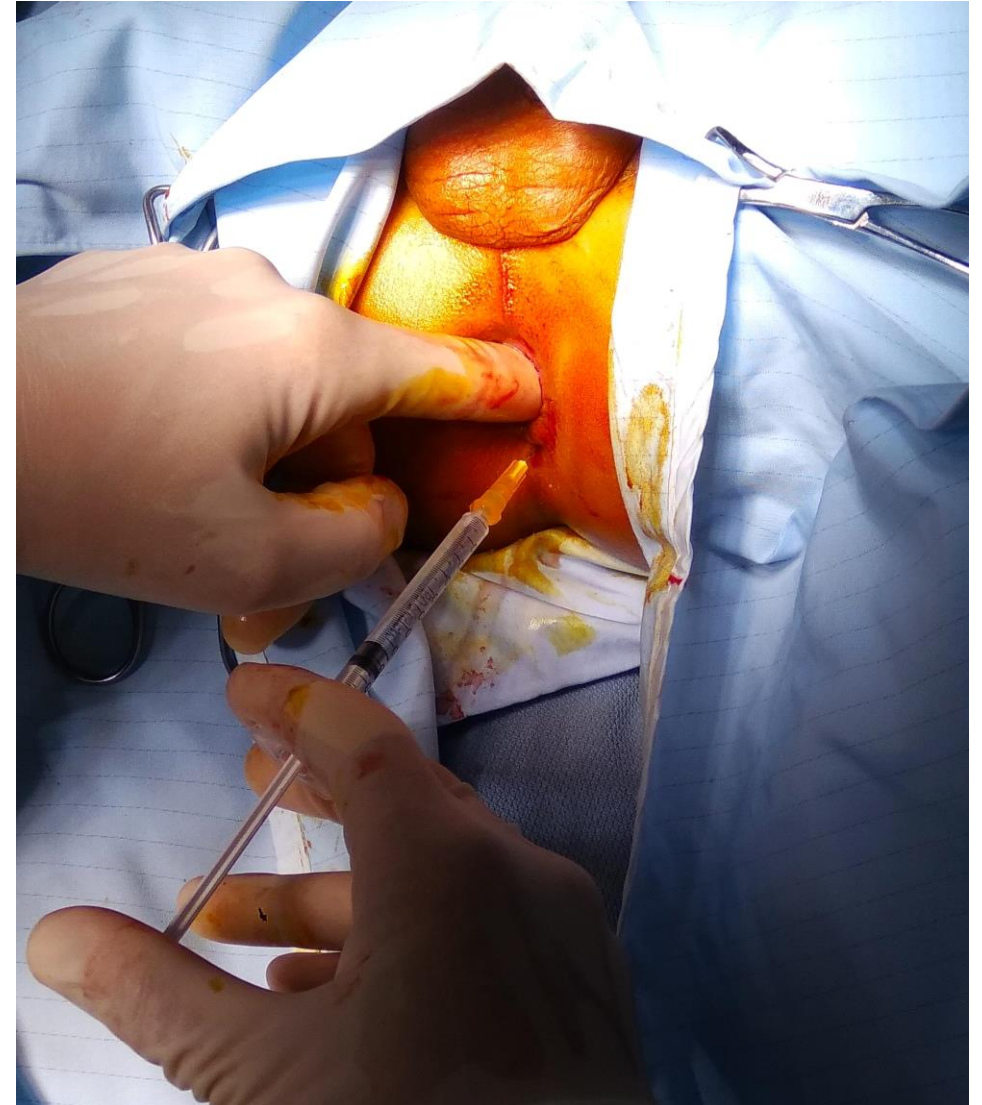
Rectal Prolapse

- Less common in children than adults
 - elderly
- Less than 4 years of age
- Anatomic variation
 - Vertical course of rectum
 - Looser mucosal attachments
 - Flatter coccyx with less developed levators
 - Mobile intestine
- Associated conditions
 - Constipation
 - Parasitic infection
 - Chronic diarrhea
 - Cystic fibrosis (malnutrition and very large stools)
 - Behavioral problems



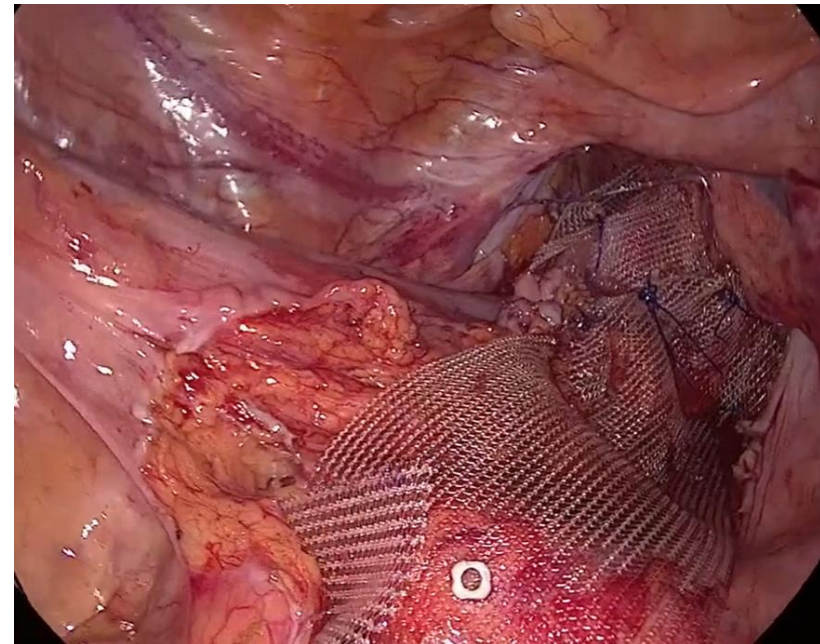
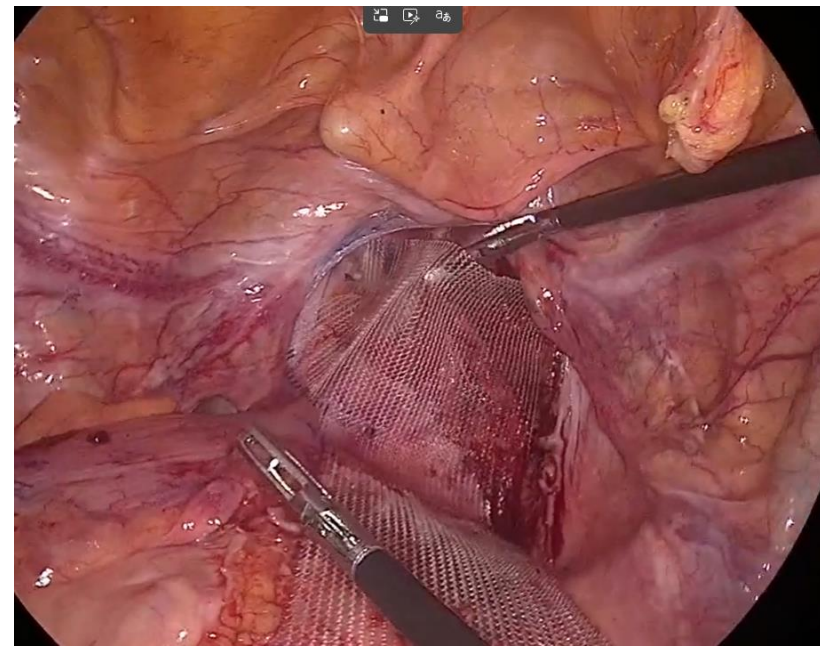
Rectal Prolapse

- Medical management
 - Treat underlying cause
 - Constipation management
 - Test for parasites
 - Behavior modification
(avoid prolonged sitting on toilet)
- Surgical management
 - Rectal sclerosis
 - Injection of sclerosing agent in the rectal wall
 - Sodium morruate
 - Hypertonic saline
 - 50% dextrose
 - Deflux (hyaluronic acid)



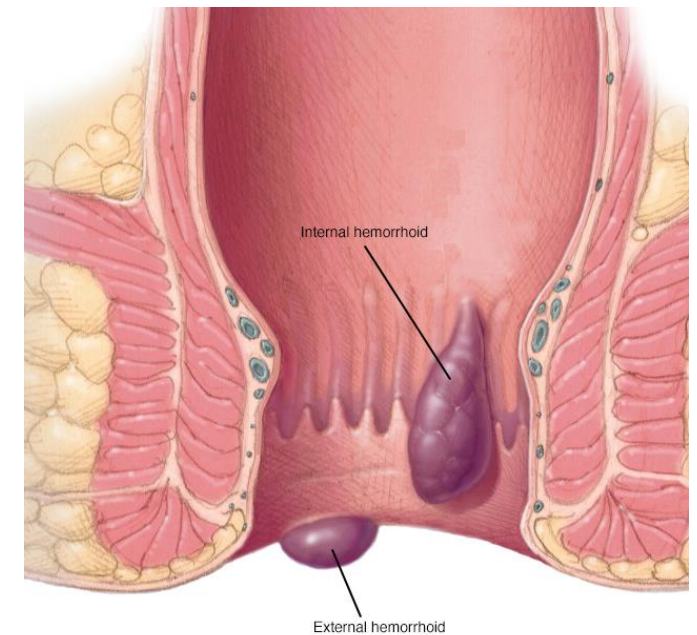
Rectal Prolapse

- Surgical management
 - Laparoscopic rectopexy
 - 35% recurrence rate
 - Mesh placement in adults
 - May require sigmoid resection
 - Invasive operation
 - Reluctant to use mesh in children
 - Teenagers



Hemorrhoids

- Symptomatic hemorrhoids are **rare** in children
 - 4.4% incidence in the general population
 - Extremely uncommon in less than 20 years of age
 - Parents often report “hemorrhoid problem”
 - Venous engorgement of the perianal skin
- Anatomy
 - Hemorrhoidal veins exist in the distal rectum
 - Component of the anal sphincter muscle complex
 - Internal (no somatic innervation) and external
- Straining due to constipation can cause dilatation
- Severe portal hypertension



Hemorrhoids

- Differential diagnosis
 - Polyps
 - Prolapse
 - Hemangioma
 - Duplication
- Medical management
 - Aimed to decreased pathologic venous congestion
 - Behavioral
- Surgical management
 - Surgery rarely indicated...
 - Anorectal exam under anesthesia to diagnose other conditions



Pilonidal Disease

- Common problem seen by pediatric surgeons
- Teenager and adults
 - Incidence of 25 in 100,000
 - Male predominance 2 to 4:1
- Acquired problem
 - Hirsutism
 - Obesity
 - Deep gluteal cleft
- Presentation
 - Most common is an acute infection
 - Gluteal cleft with pits/ midline or near

Pilonidal Disease

- Surgical management
 - Multiple approaches
 - Resection with full thickness or partial flaps (hospital length of stay 8 days)
 - Cleft lift operation (17 months median wound healing time)
 - 2008 – Gips procedure – minimally invasive technique
 - Coring out tracts
 - Foreign body removal
 - Destruction of tracts
 - 17% failure rate
 - Hair control in paramount to prevent recurrence

Pilonidal Disease

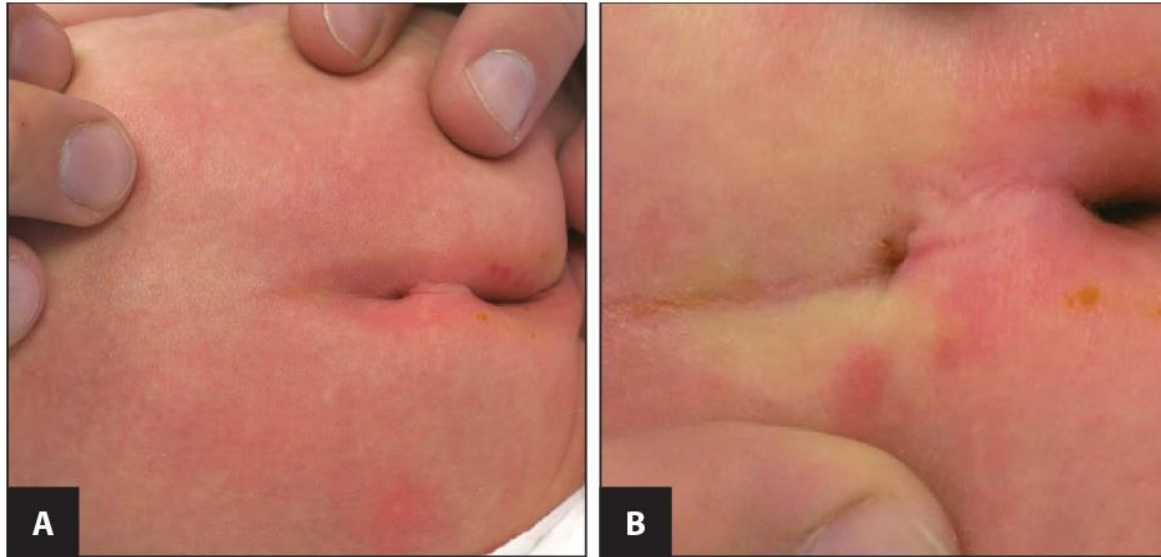


Pilonidal Disease



Pilonidal Disease

- Sacral dimples during infancy are not a risk factor
- Nothing to do unless there is a suspicion for a spinal dysraphism



The enigmatic sacro-coccygeal dimple: to ignore or explore? Block, S. Pediatric Annals. 2014

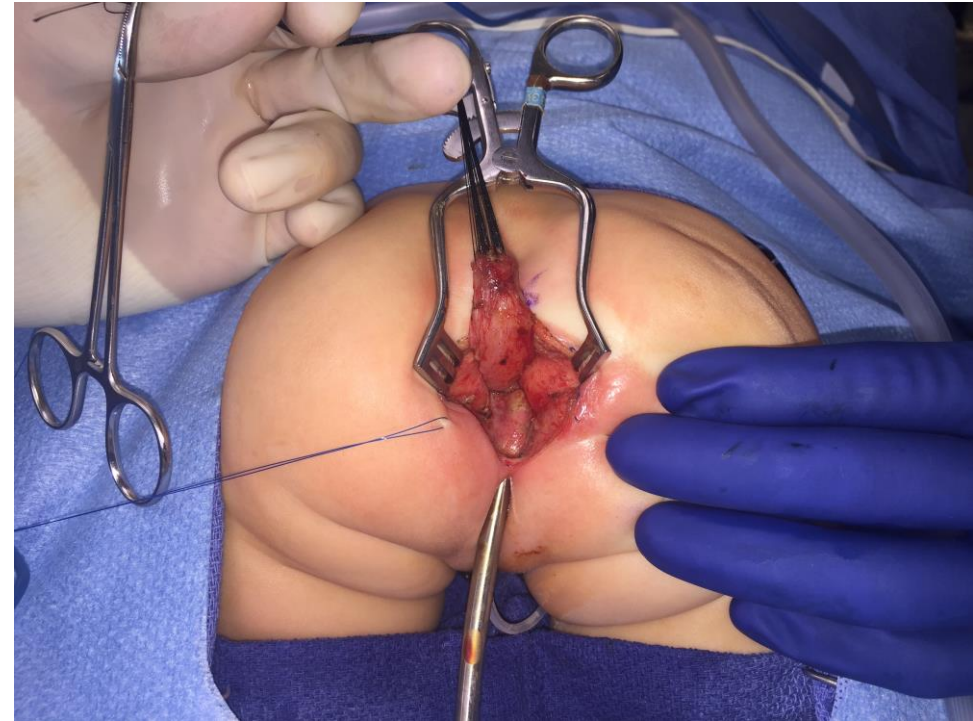
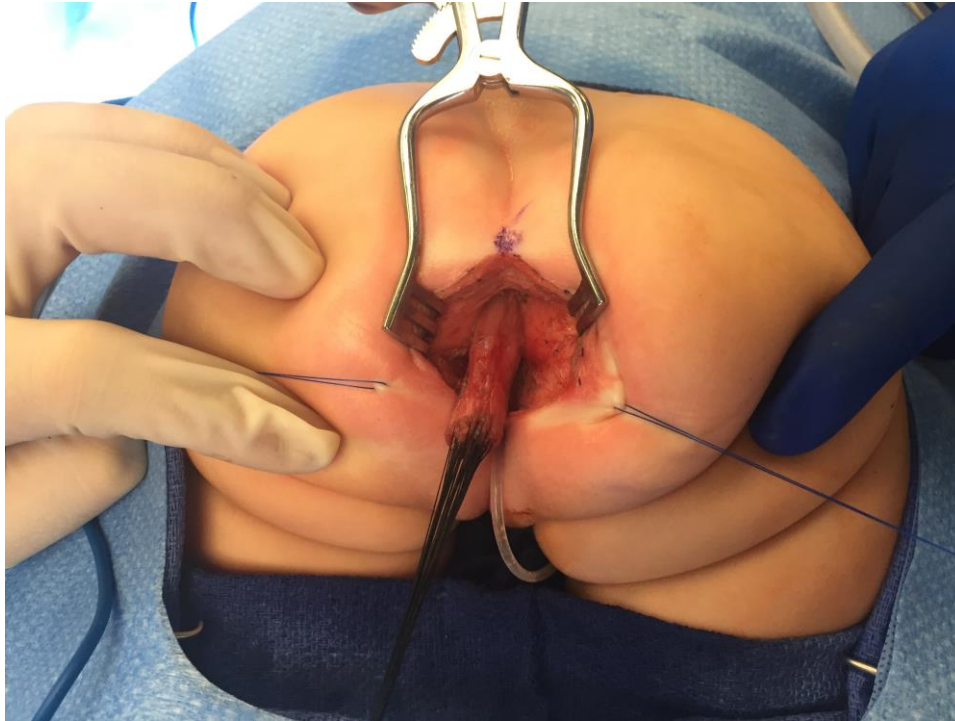
Perineal Fistula (Anorectal Malformation)

- aka Anterior Anus
- True anorectal malformation
 - 1 in every 4000-5000 births
 - Perineal fistula 10% of AMRs
- Clinical diagnosis
 - OR for EUA in some cases
- No anus
 - Adequate perineal body length
 - Opening adequate size
 - Opening in the sphincter muscle complex
- Usually not a problem during early years
 - Leads to constipation initially
 - Incontinence if left untreated in the future



Perineal Fistula (Anorectal Malformation)

- Surgical management
 - Posterior sagittal anorectoplasty



Perineal Fistula (Anorectal Malformation)

- Relocation of the rectum to the sphincter muscle complex
- Will require dilatations for some time



References

- American Pediatric Surgical Association (APSA) - NaT (Not a Textbook)
- **PedSurgLibrary.com**
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Questions