Case #3

Requests reversal of ostomy

HPI

- 10 yo male presents to the ED with severe left sided abdominal pain and discharge from anus. He is febrile and tachycardic
  - He is admitted and ultimately diagnosed with colitis (Shigella) with overflow diarrhea into efferent limb

- Syrian Refugee recently immigrated to Canada. No prior medical documents available

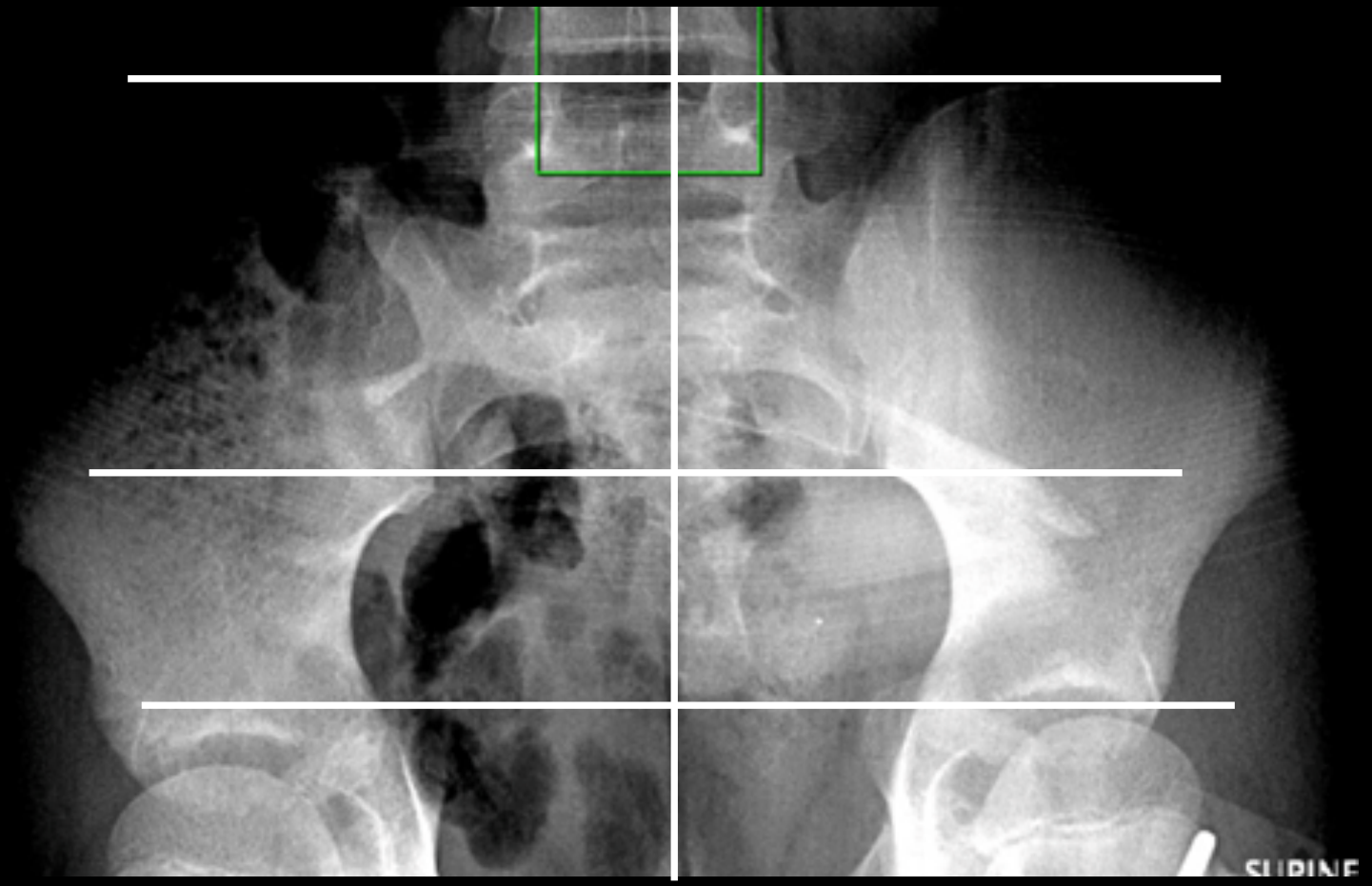
PMHx/PSHx

- Born full term and spent several weeks in NICU
- Passed stool within 24 hours
- Anus never looked normal and he is sent home with family performing dilations
- Age 2: first laparotomy and surgery on the “bladder”
- Age 3.5: second laparotomy and creation of a colostomy
- Age 4: third laparotomy and revision of colostomy (presumably the loop transverse colostomy he has now)
- 8 yrs old: laparotomy, pull through and PSARP complicated by perineal wound infection and significant scarring
- 8.5 yrs old: appendicitis with open appendectomy

Examination

- Multiple scars in the abdomen with midline laparotomy incision extending above umbilicus to pelvis
- Multiple left para-median incisions
- Multiple left para-stomal incisions
- RLQ appy incision

- PERIANAL exam:
  - Severely scared multiple incisions (not extending to coccyx)
  - Hypotonic anal sphincter, passes a # 6 Hegar
  - Hypersensitive to examination
  - Deep sulcus
  - Absent anal wink
  - ? Anterior shelf



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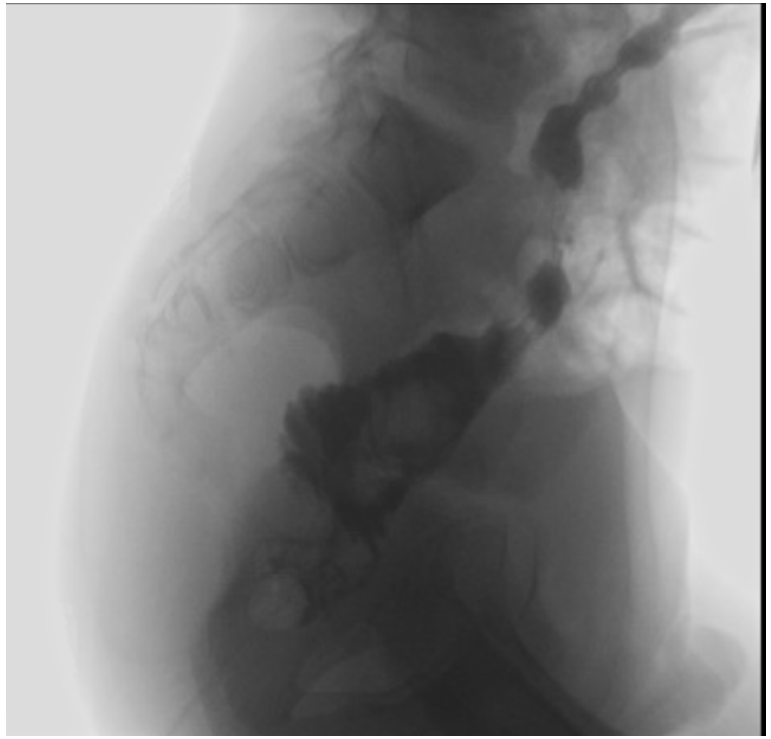
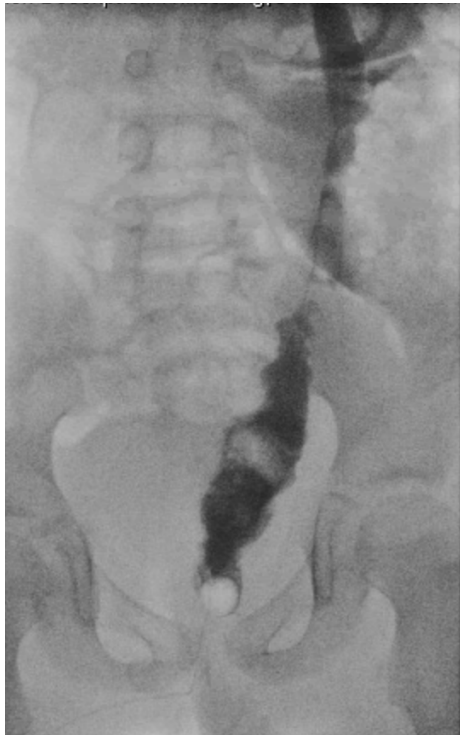
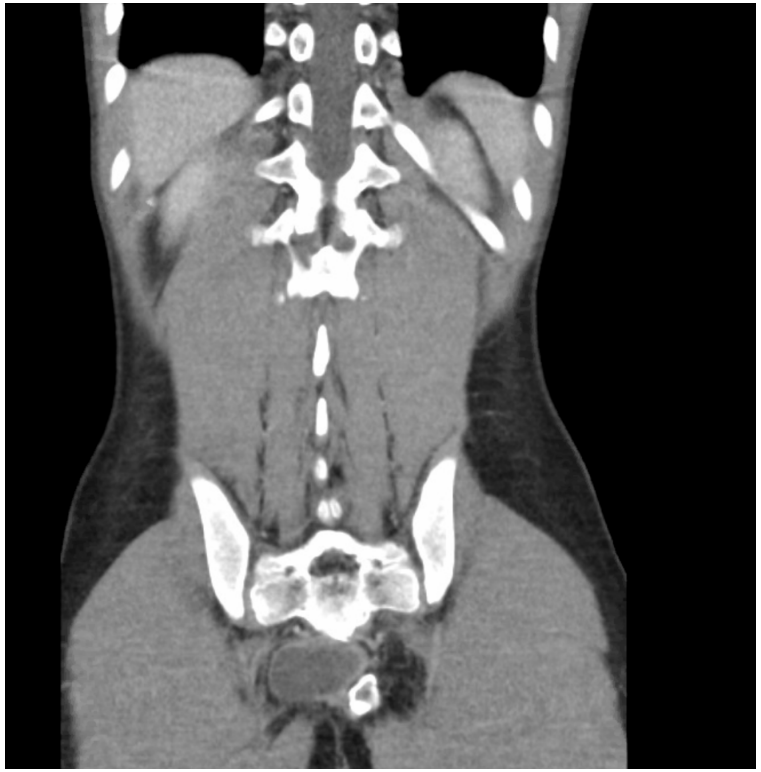
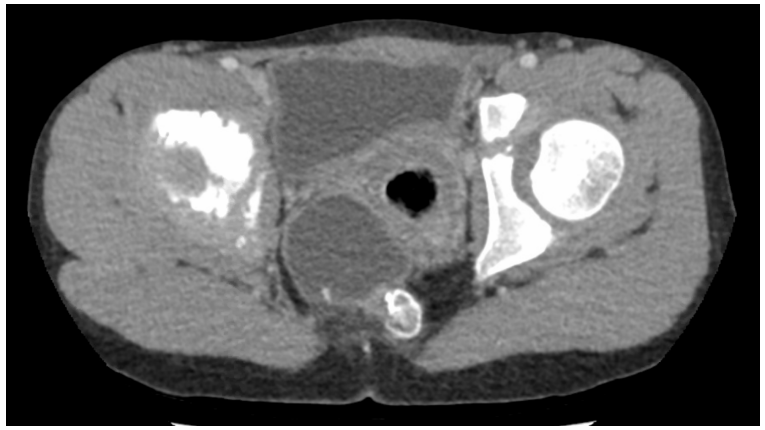


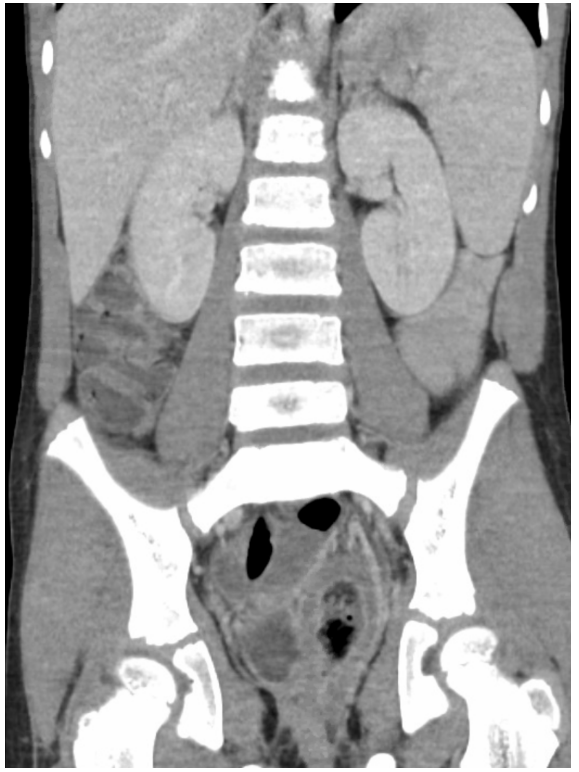


LGIS THROUGH ANUS

- FINDINGS:
  - LGIS DONE THROUGH ANUS (7F FOLEY CATHETER PLACED) DUE TO SEVERE ANORECTAL STRICTURE
  - IRREGULAR MARGINS OF RECTUM AND COLON TO THE LEVEL OF COLOSTOMY LUQ
  - POSTERIOR RECTOCELE



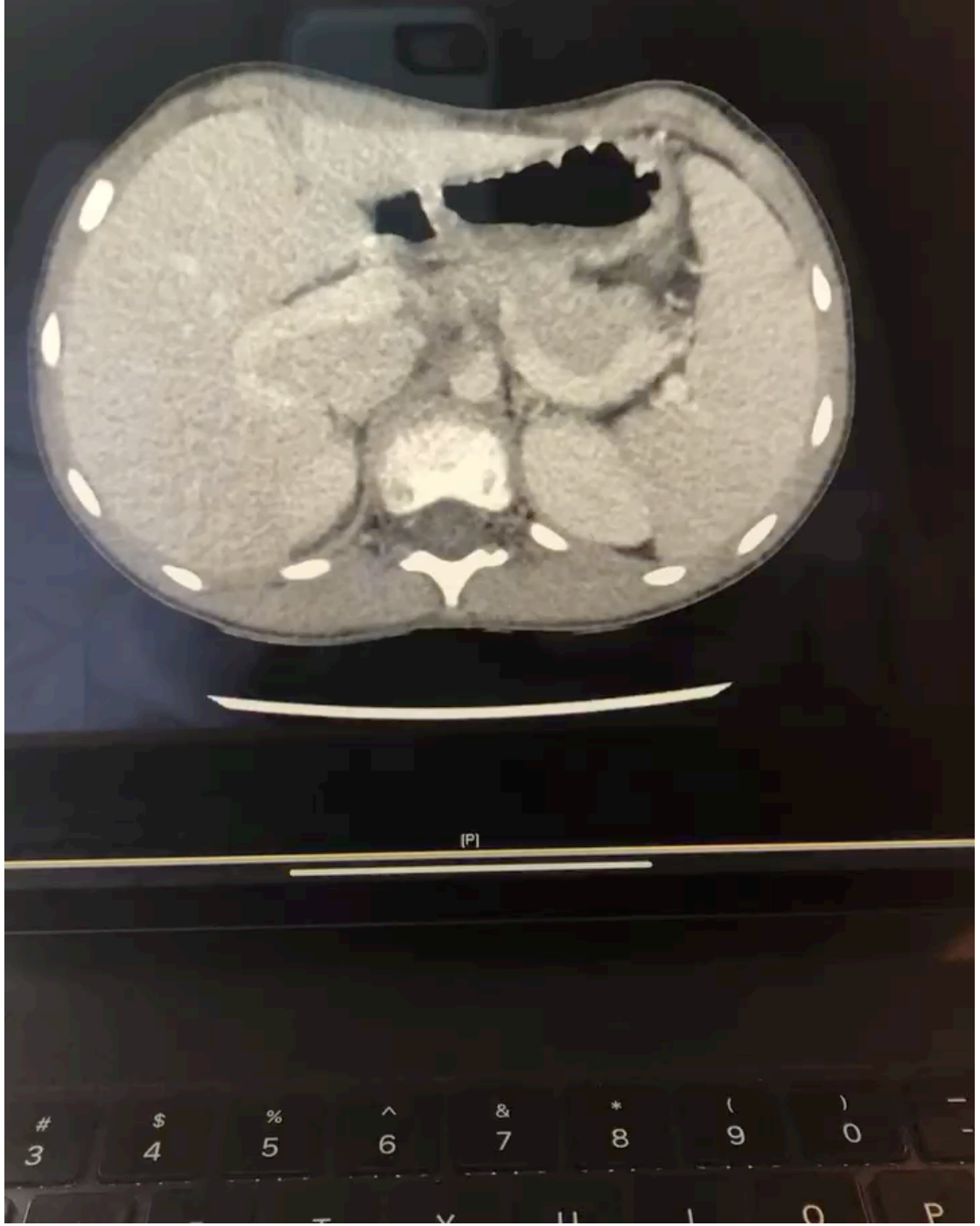


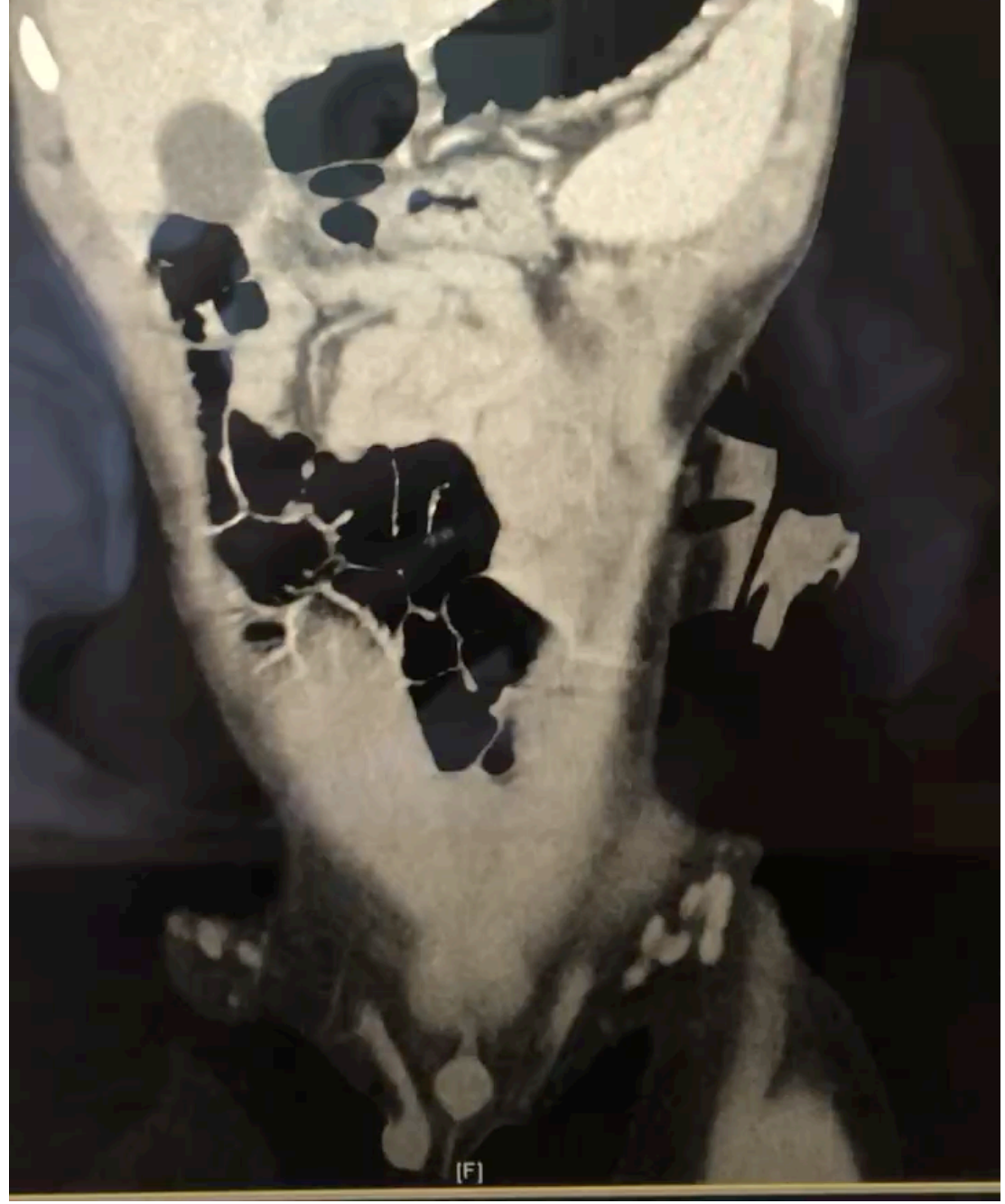


CT ABDOMEN AND PELVIS

- FINDINGS:
  - THICKENED DESCENDING COLON/RECTUM
  - PRESACRAL THIN WALLED CYSTIC MASS: 6.3 X 5.1 X 4.7 CM
  - LEFT PARAMEDIAN LOOP COLOSTOMY WITH AFFERENT LIMB INVOLVING TRANSVERSE COLON PRESERVED HEPATIC FLEXURE AND ASCENDING COLON AND CECUM IN NORMAL POSITION. EFFERENT LIMB INVOLVING RECTOSIGMOID

CT abdomen and Pelvis

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MRI PELVIS AND SPINE

- Thickened rectum/sigmoid
- Complex configuration of anal verge with mild angulation at the AR junction and a narrowed canal
- Distal sacral vertebrae partially fused and inclined to the left (scimitar deformity)
- Thin walled presacral cyst not communicating with spinal canal favored to represent dermoid

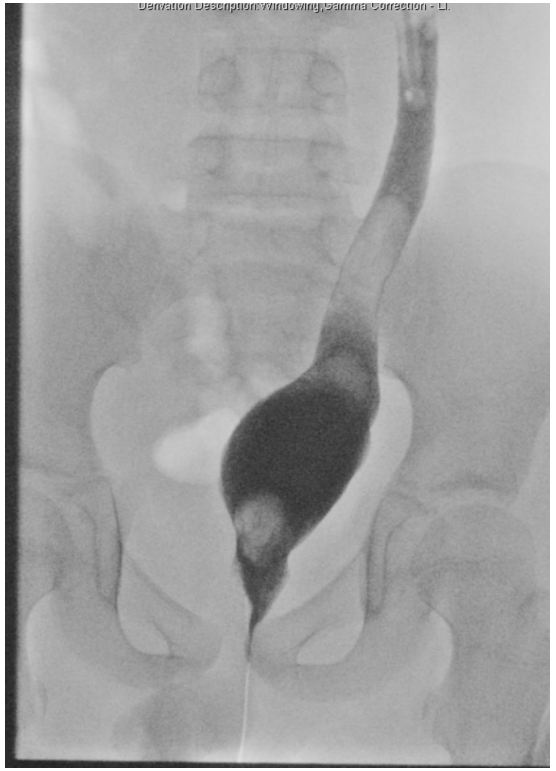
Problem list

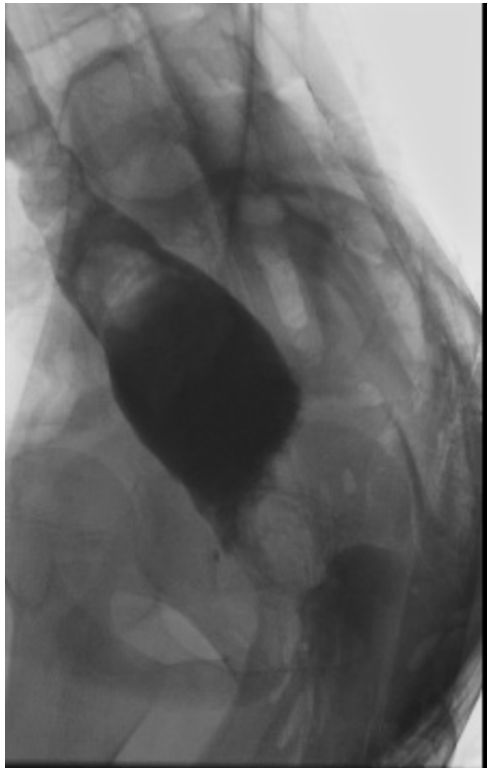
- Unknown anatomy with multiple prior surgeries and no medical records
- Presacral mass
- Anal stenosis
- Patient’s primary desire for reversal of colostomy

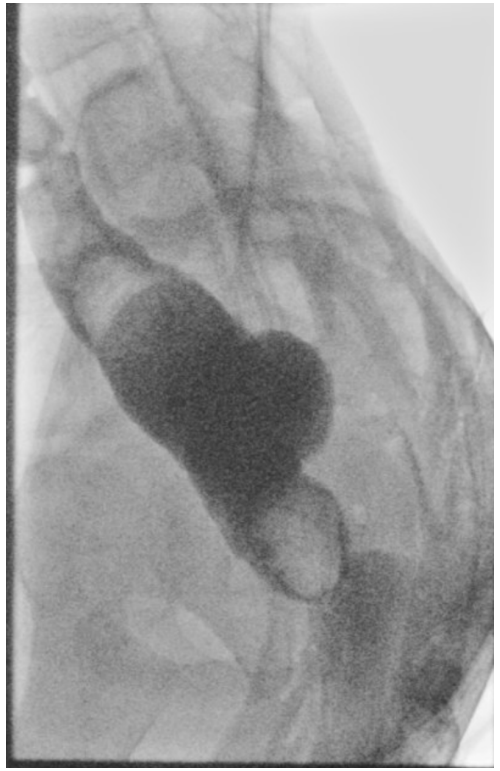
December 2019

- EUA
- Pena stimulator to assess muscle fibers (none)
- Anoplasty (opened shelf anteriorly) (can now pass # 15 Hegar)
- Resection of presacral mass with tip of coccyx through posterior approach

- PATHOLOGY
  - Epidermoid cyst







LGIS (THROUGH MF) JUNE 2020 (POST RESECTION PRESACRAL MASS)

- FINDINGS:
  - LEFT COLON AND RECTUM PATENT WITH NO STENOSIS
  - ANTERIOR TO RECTAL WALL, SMALL CONTRAST EXTRAVASATION ?FISTULA
  - POSTERIOR RECTAL WALL RECTOCELE
  - PATIENT UNABLE TO “HOLD” CONTRAST

ARM: to assess function prior to reversal

- Examination:
  - Lax sphincter (open at all times) with severe scarring ‘frozen anus”
  - External sensation normal
  - Absent wink reflex

- Sphincter resting pressure 65mmHg
- Sphincter squeezing pressure 135mmHg sustained for max 4 sec
- Rectal sensory:
  - Rectal threshold 20mL, pain at 40mL
- RAIR likely at. 20mL dissension but given hypotensive sphincter can’t test acurately
- On Straining:
  - Anal sphincter did not show proper relaxation
  - Balloon expulsion test positive (patient NOT ABLE to expel balloon

Summary of findings:

1) HYPOTENSIVE ANAL SPHINCTER WITH LIMITED CAPACITY TO SQUEEZE
2) NO PROPER CONTINENCE MECHANISM OR PROPER OUTLET BARRIER FUNCTION

Current State

- Still not sure of anatomy given multiple prior laparotomies and ostomy revisions
- Patulous severely scarred anus with no tone and discouraging ARM results
- Patient currently has a poorly situated loop colostomy resulting in multiple leaks and requiring frequent ostomy changes (financial burden)
- Perceived para-stoma discomfort by patient
- Patient wants to reverse ostomy and function normally

Questions to the group

- My next plan was to take to the OR and create a new ostomy and perform colonic and rectal biopsies
  - Goals of this OR
    - To understand the anatomy
    - To understand underlying pathology
    - To create a “good” ostomy so that patient can experience life with a well functioning stoma. His only ABDO domain left is RLQ. I was thinking of giving him a loop ileosotmy (easily reversible and leaves options open).
- QUESTIONS
  - IF YOU AGREE WITH THE ABOVE PLAN:
    - What type of stoma would you give him?
    - What happens if he hates the new stoma and still wants reversal?
    - What happens if he loves the stoma? Would you resect defunctioned colon?
  - IF YOU DON’T AGREE WITH THE ABOVE PLAN:
    - What other suggestions would you have?