COLORECTAL WEB MEETING
SEPTEMBER 22, 2022

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Case

- 12-year-old boy
- Hirschsprung disease
- **At 3 mo had a Lap-assisted pull-through and rectal Botox injection**
- Did well for 3 years?

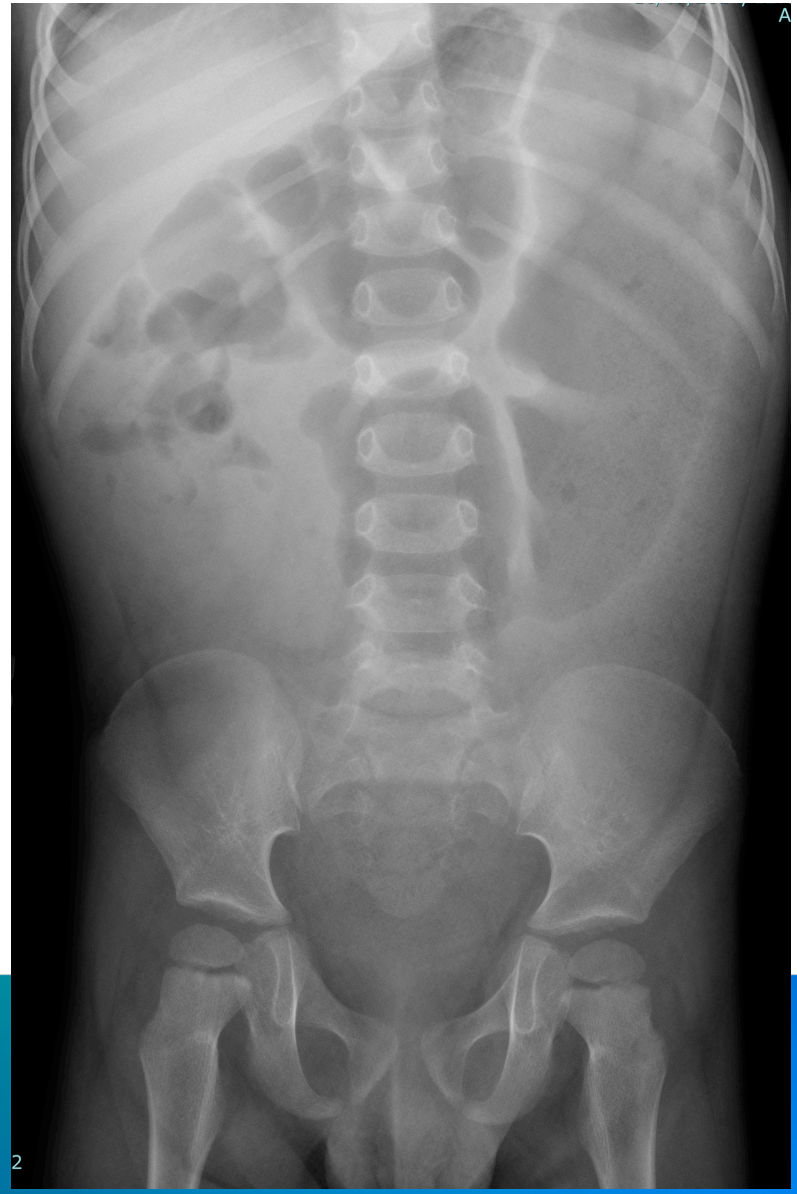
- 3yo had obstructive symptoms, no stooling, nausea, vomiting
- Contrast enema and rectal biopsy negative for retained Hirschsprung disease
- Patient was referred to GI service
  - Polyethylene glycol, Senna, Botox
- No improvement
- Stooling only with irrigations

Question

Patient continues with obstructive symptoms. X-ray shows a dilated left colon.

What would you do?

a. Irrigations
b. Botox
c. Colonoscopy
d. Ileostomy
e. Colostomy



ILEOSTOMY to rest the colon.
Patient gain weight and asymptomatic

- 4yo and 9m Laparoscopic-assisted loop ileostomy

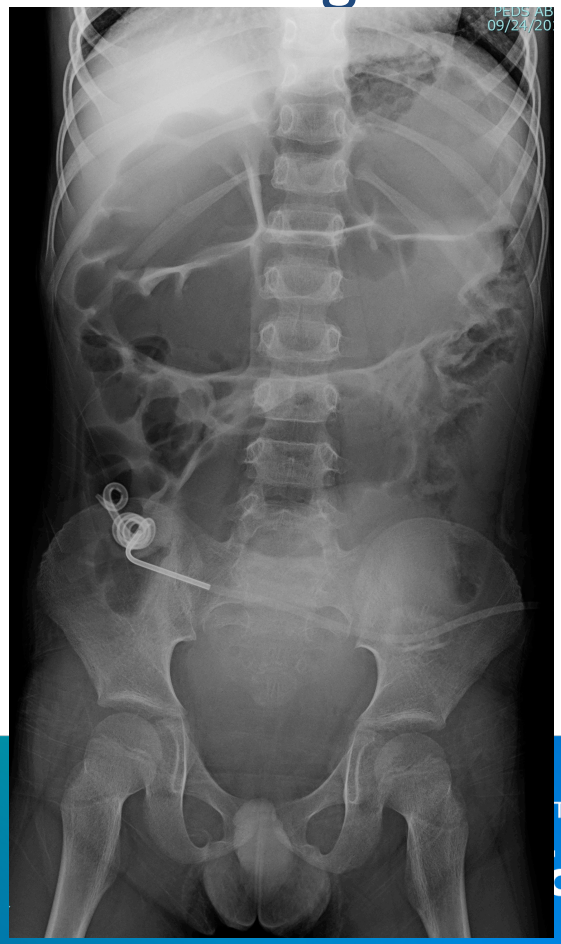
- **5yo and 11m ileostomy closure *with ileocecal resection***

Question

After ileostomy closure, patient continues again with obstructive symptoms (nausea, vomiting and abdominal pain) and again very dilated colon. Restart irrigations.

What would you do?

a. Work-up for persistent obstruction
b. Redo pull-through
c. Ileostomy
d. Colostomy
e. Botox



Work up for persistent obstruction

- **6y7m - Rectal manometry:** Recto-anal-inhibitory reflex was absent. Simulation defecation showed insufficient anal canal relaxation

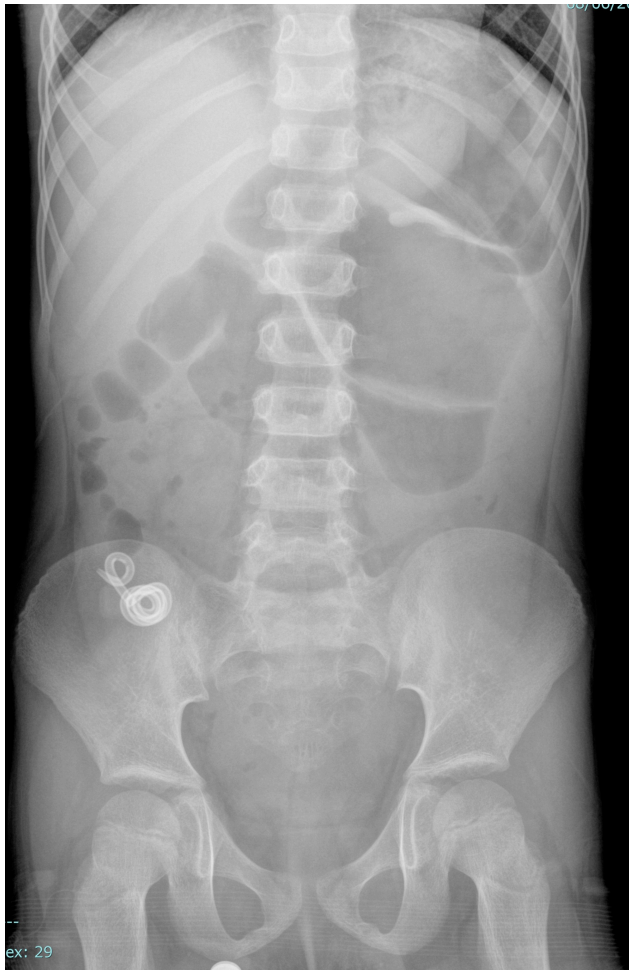
- **6y10m - 4th Botox anal injection**

- **7y3m Colonic manometry:** Suggestive of poor colonic motility throughout the colon, primarily in descending colon

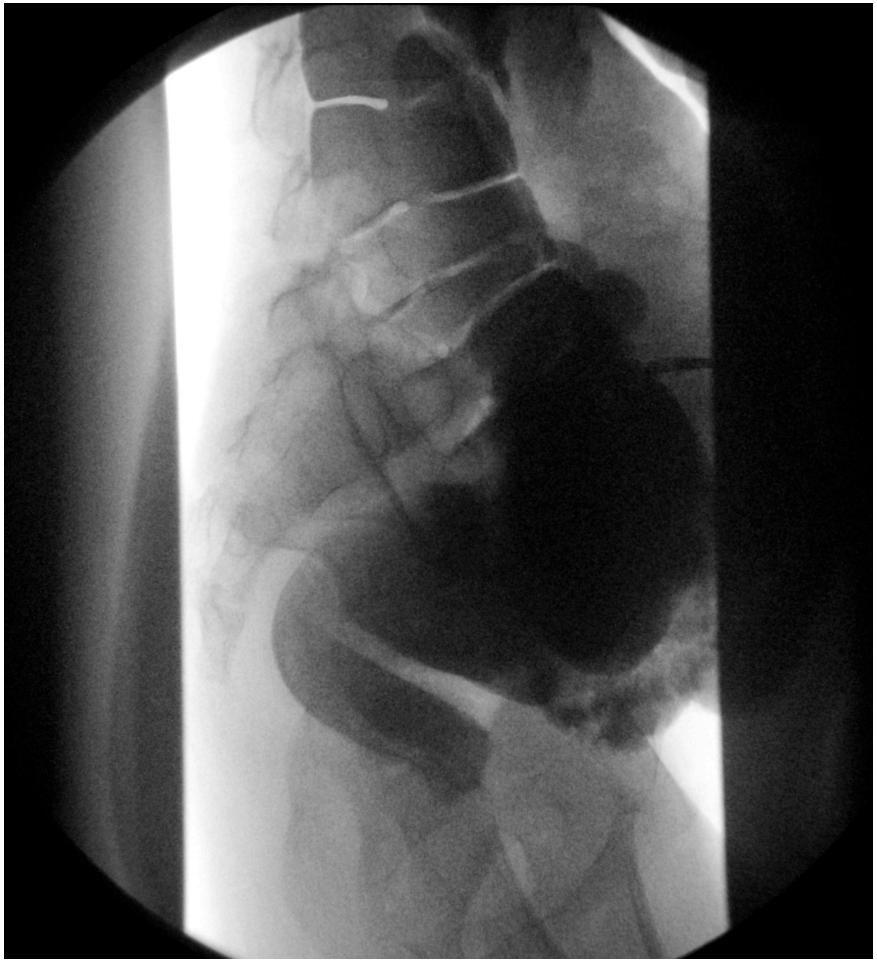
7y5m

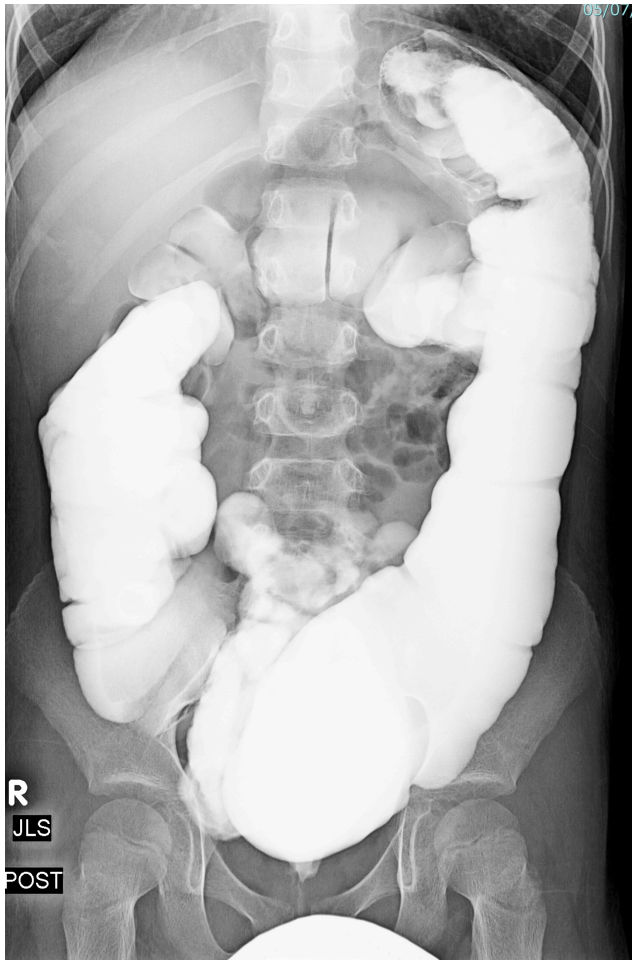
- Laparoscopic placement of Chait cecostomy

- **7yo and 8m:**
  - Unsuccessful antegrade enemas.
  - Flush does not come out through the anus.
  - After flush patient requires rectal irrigations.



Contrast study through cecostomy tube





7y8m

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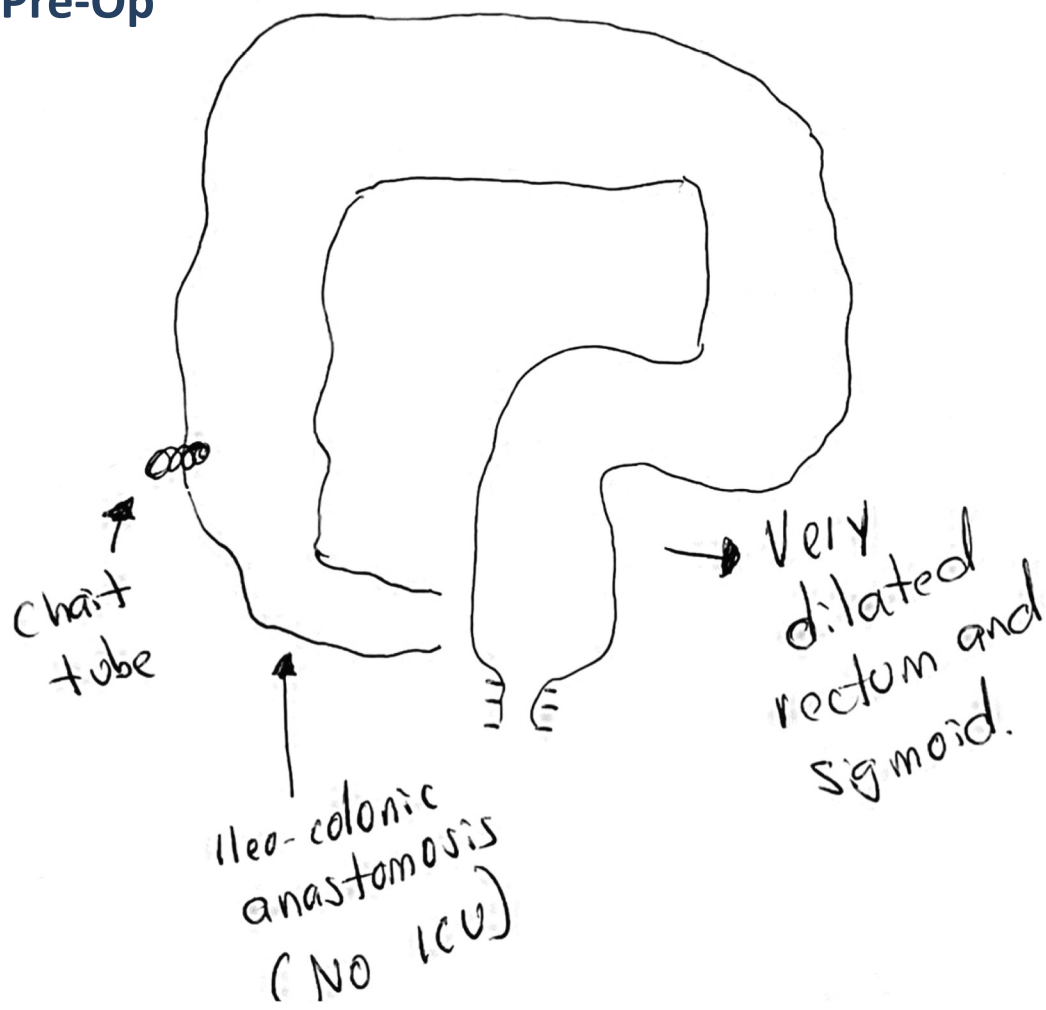
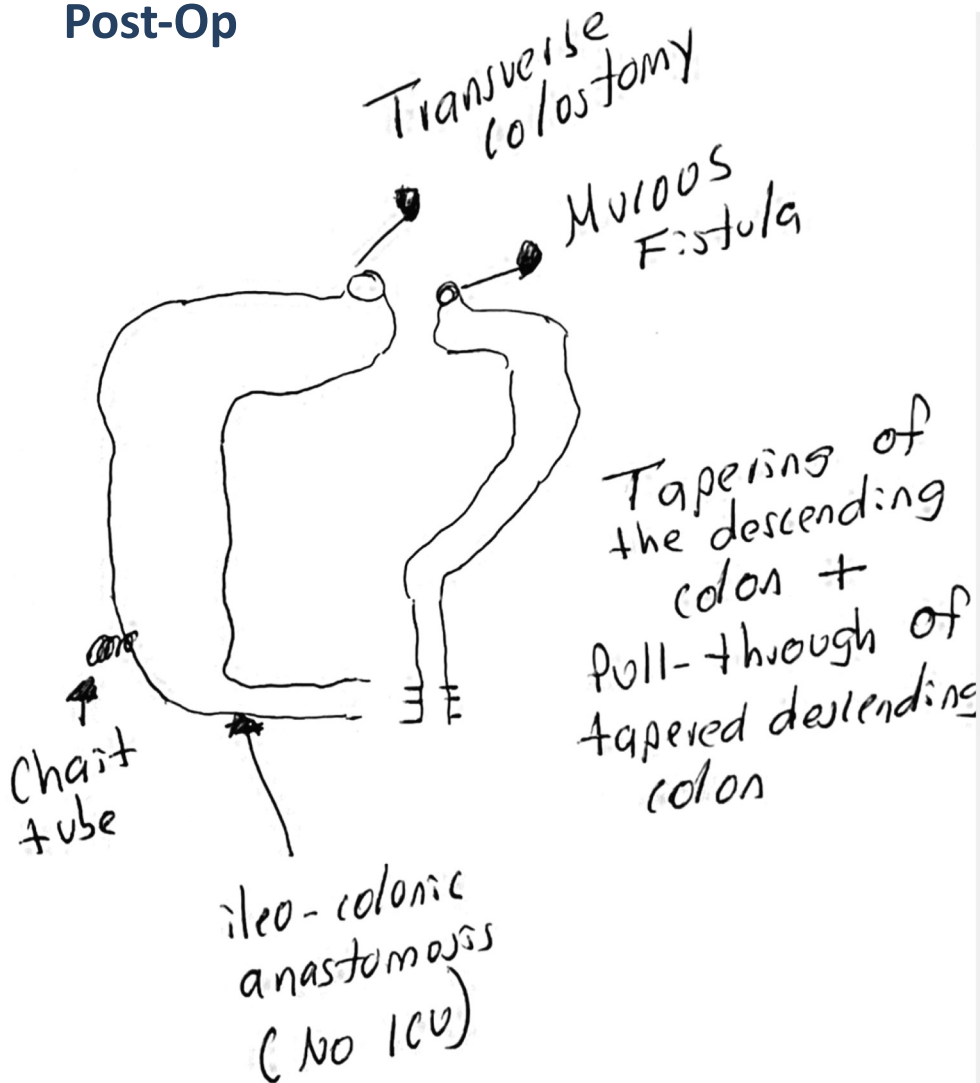
- **8yo: Rectal examination under anesthesia and full-thickness rectal biopsy**
  - Good sphincter. Intact pectinate line.
  - Pathology Surgical report: No ganglion cells. No hypertrophic nerves. Extensive smooth muscle hyperplasia and fibrosis in the submucosa.

8y – Proctocolectomy 20 cm. Tapering of gigantic descending colon to allow a pull-through. Creation of left transverse colostomy and mucous fistula.

Pre-Op



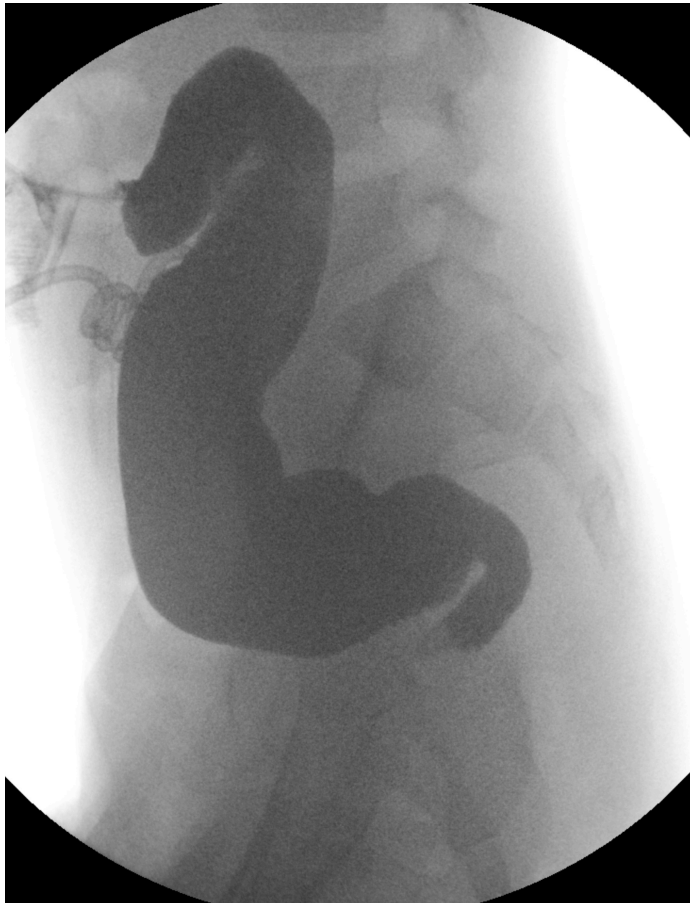
Post-Op

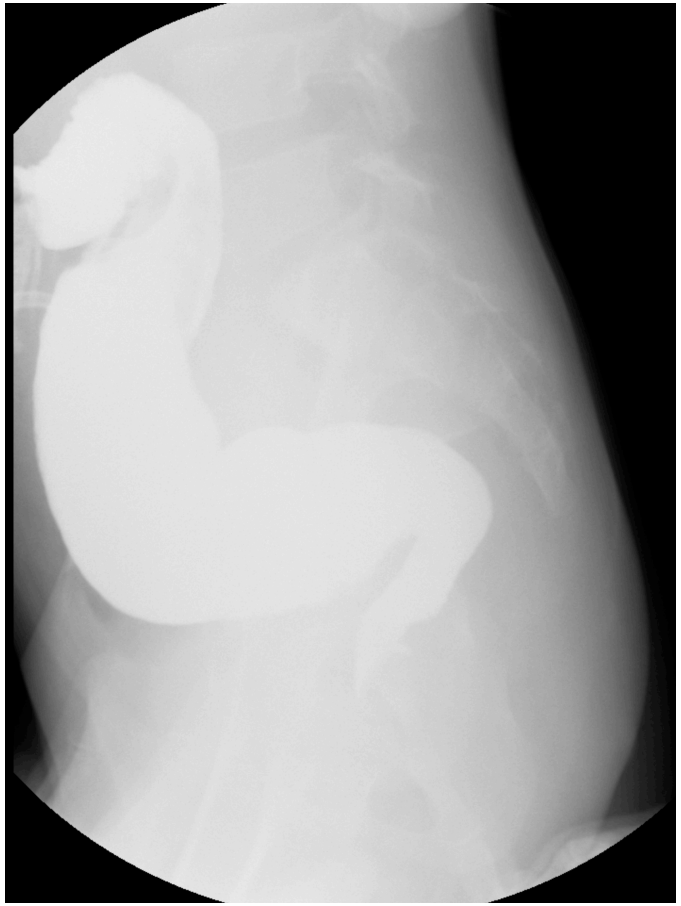


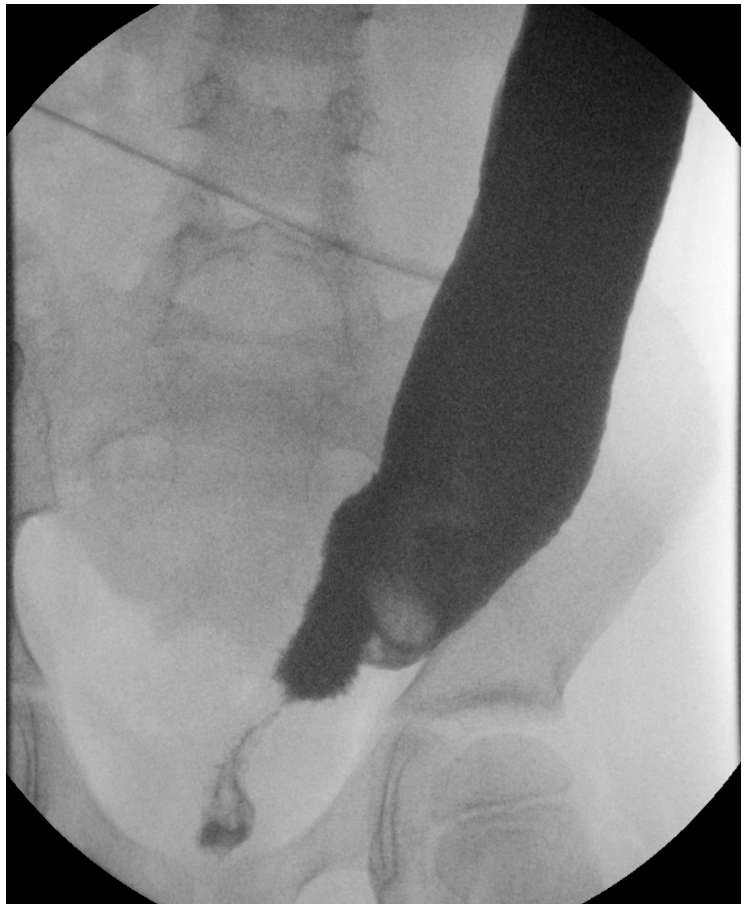
Surgical pathology report

- Ganglion cells present circumferentially at the proximal and distal margins and throughout the entire resection length without nerve hypertrophy or eosinophilia infiltrate.

Distal Colostogram







8y3m Rectal exam: No stricture

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8y9m: Colostomy closure

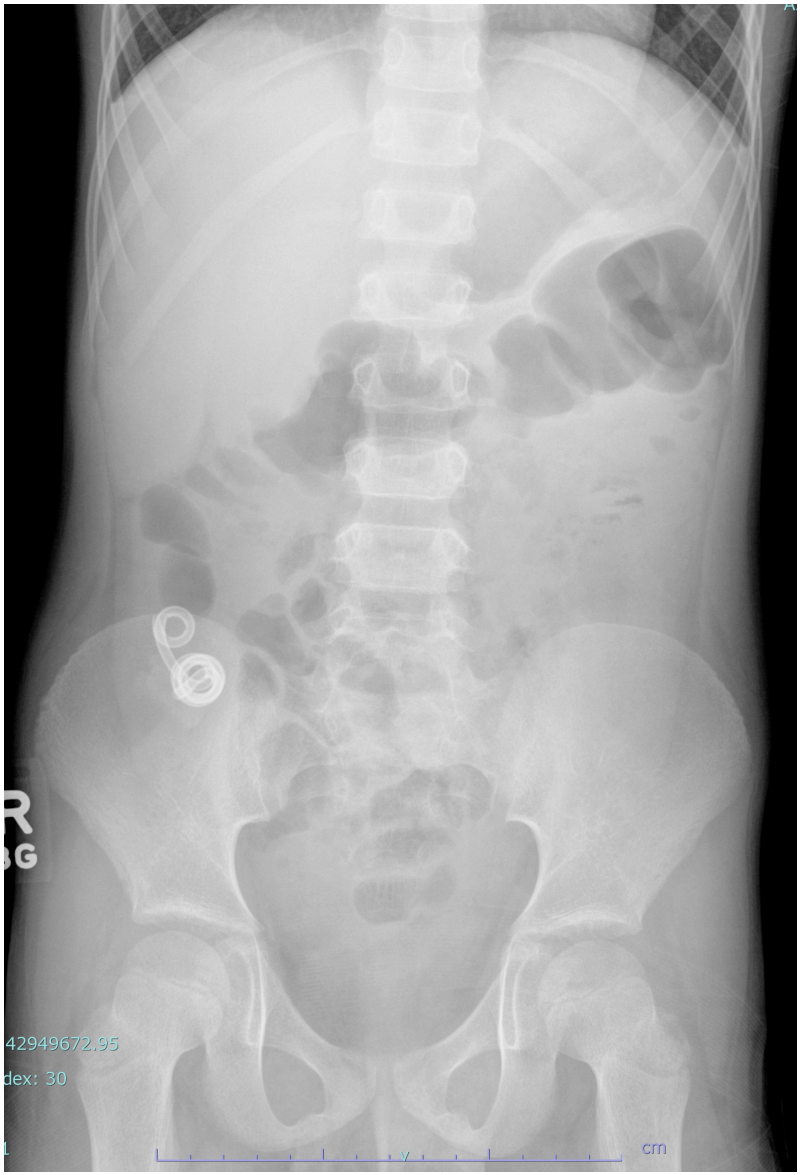
- Follow up, 13 days post-op. X-ray clean colon. Fecal incontinent. Urinary continent. Irrigations twice daily

- Started bowel management with antegrade enemas

- **8y11m - 11y6m:**
  - Enemas through cecostomy produce nausea and vomiting requiring rectal decompressions or irrigations after the flush.

11y6m

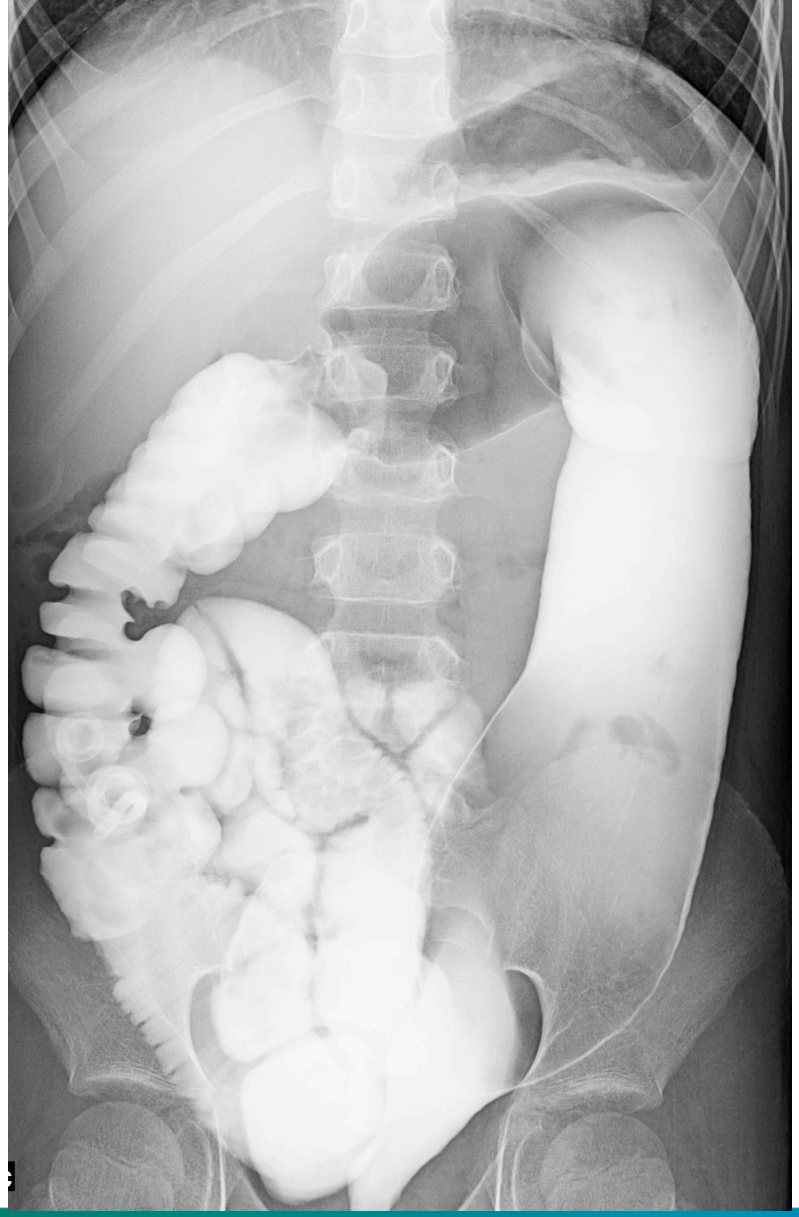
- No bowel movements with antegrade enema. Nausea and vomiting.
- Requires irrigations
- X-ray: clean and decompressed



Question

With these symptoms, what would you do?

a. Rectal manometry
b. Contrast enema
c. Examine under anesthesia
d. Full thickness rectal biopsy
e. B, C and D



Contrast enema through Chait tube

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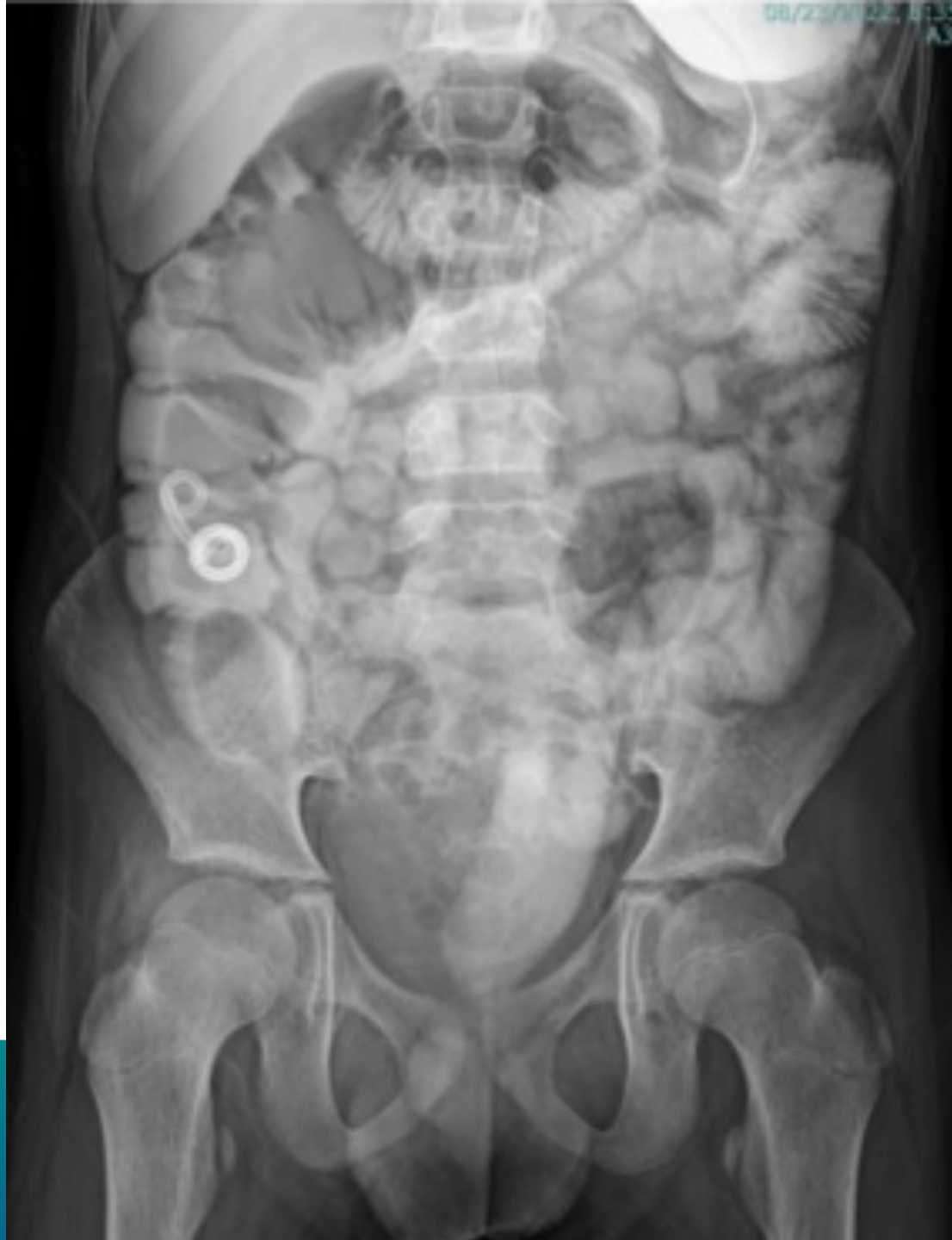
- **<u>11y7m: Exam under anesthesia</u>**
  - Digital exam with no mechanical obstruction. BUT, **a tight** anal canal with immediate explosive liquid bowel movement. Incomplete anal canal in all the circumference.

Plan: Schedule resection of left colon.

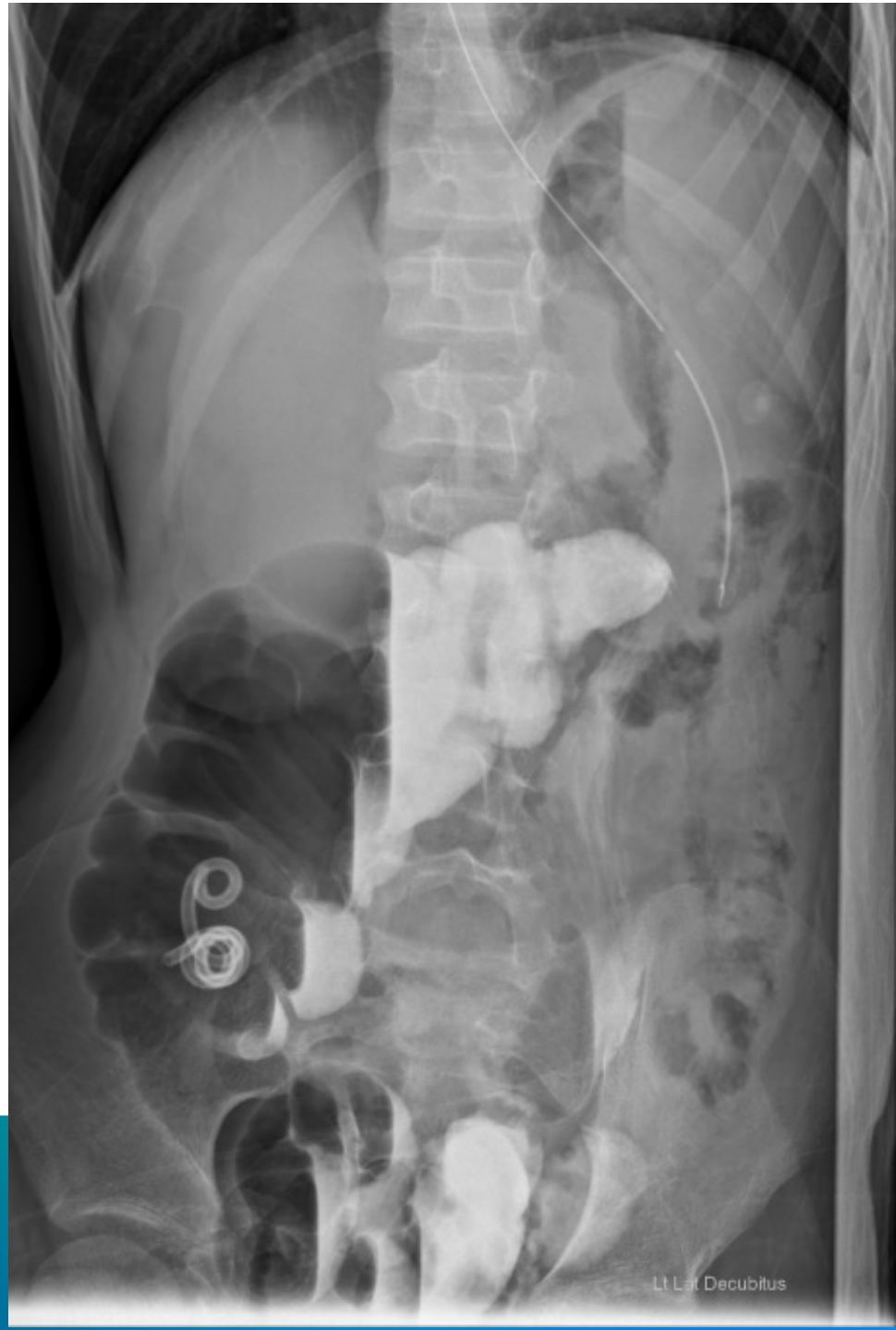
- **11yo and 11m: Left colectomy with colorectal anastomosis and Botox**
  - Massive dilation of left colon
  - Pathology:
    - Left colon. Ganglion cells present.

Day 6 Post-op

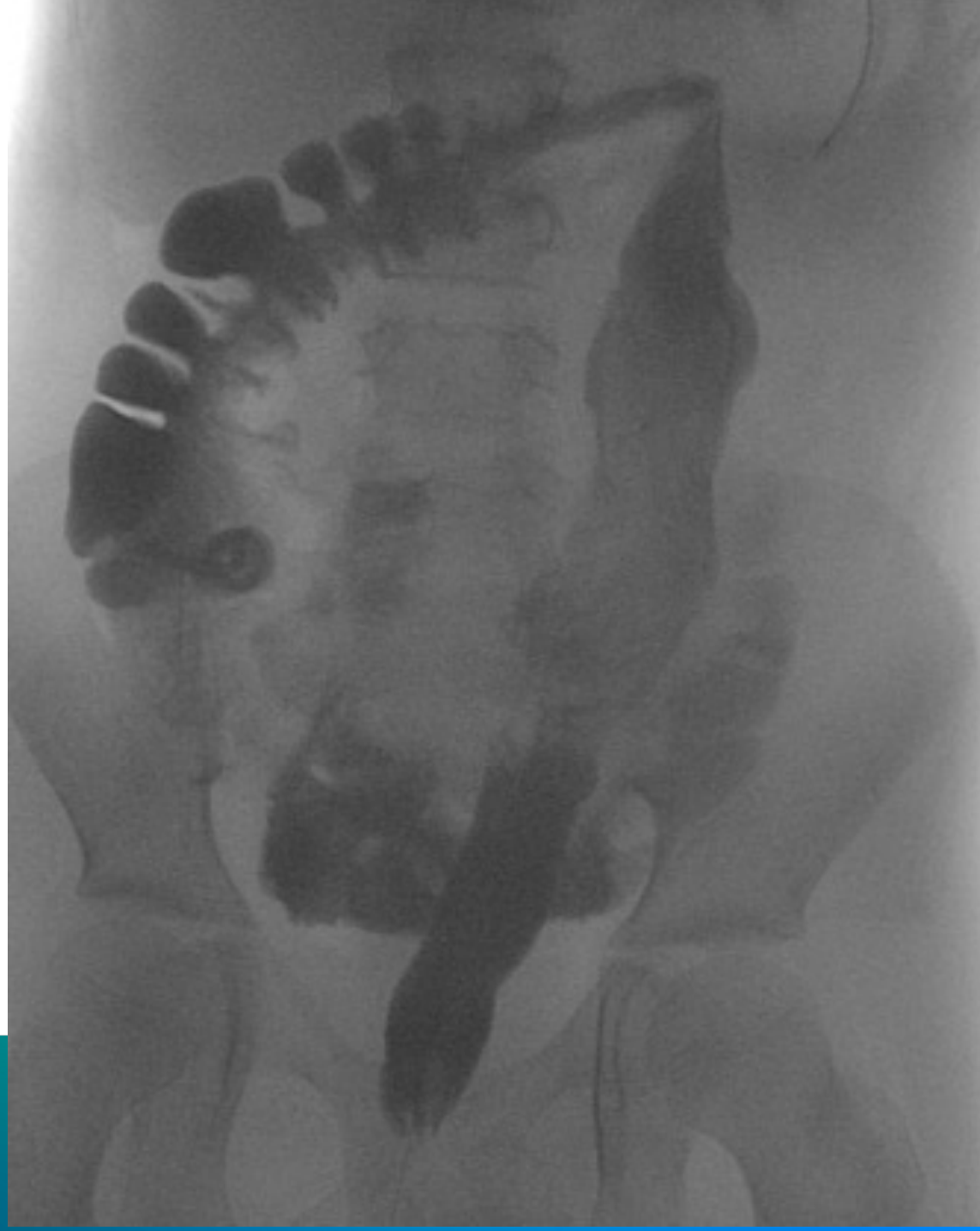
- NG tube significant bilious drainage.
- UGI w/SBF no mechanical obstruction
- No effective antegrade enemas producing nausea and vomiting. Required rectal tube to resolve symptoms.



Day7 Post-Op
Contrast study through cecostomy



Day7 Post-Op
Contrast enema



Exploratory laparotomy was performed

Findings:

- Dilated right colon
- Important colo-ileum reflux (history of ileocecal resection)
- Obstruction of the anastomosis on the site of previous colostomy (intrinsic and extrinsic)
- Functional and mechanical obstruction of distal colon (pelvic segment).

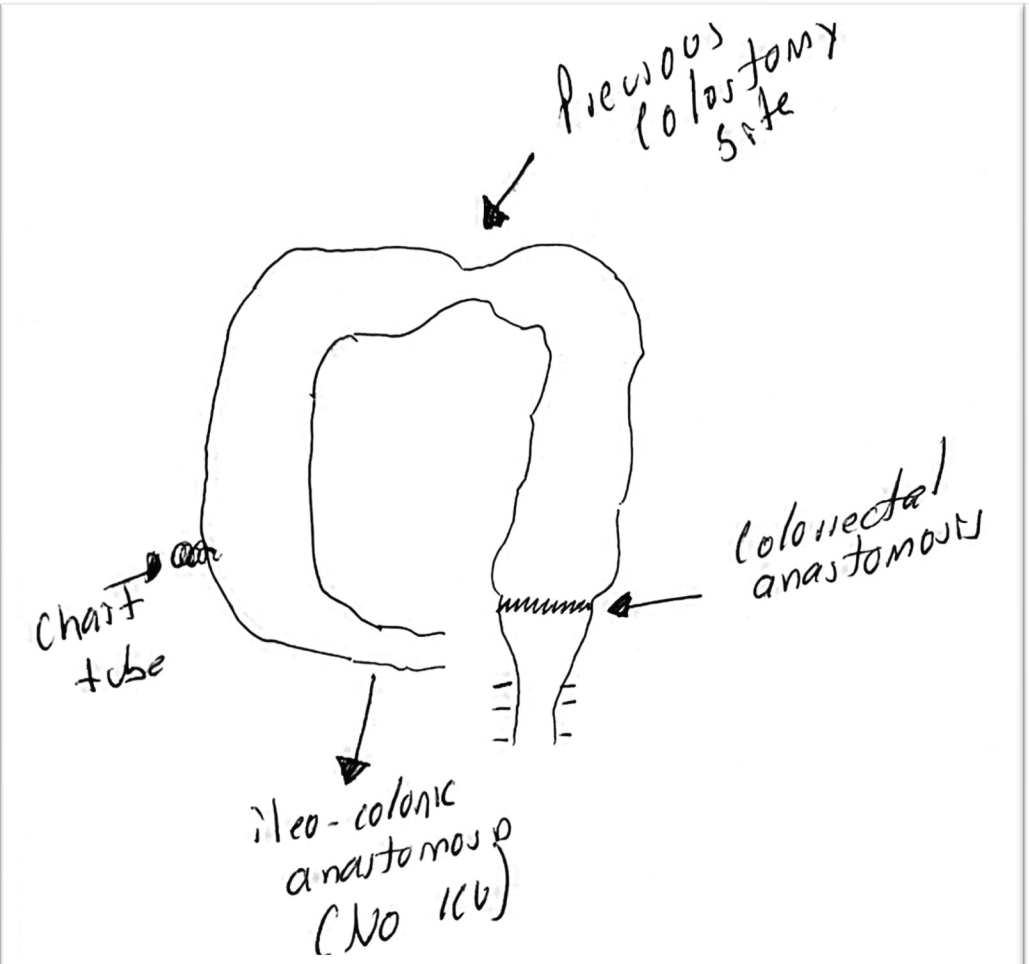
What would you do?

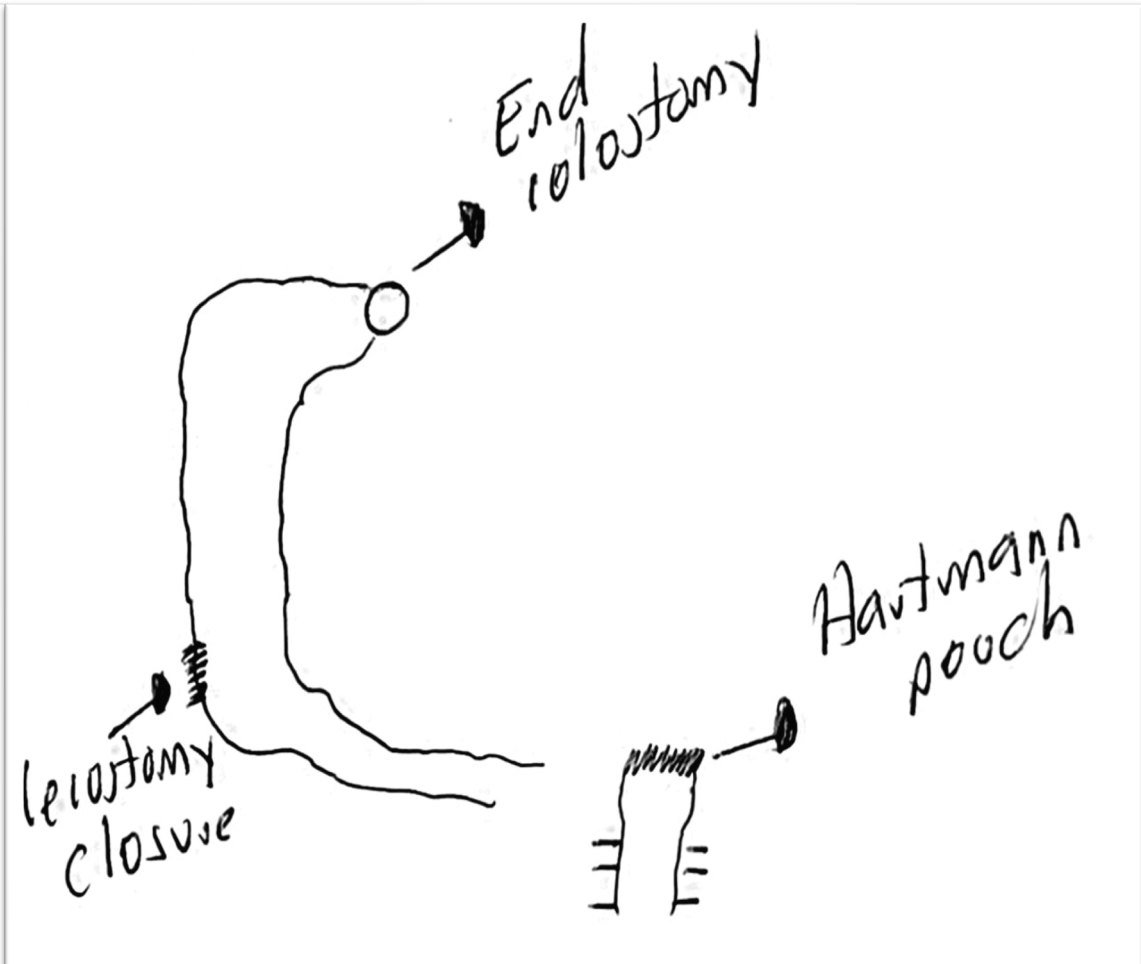
a. Redo Pull-Through
b. Total colectomy + ileo-anal anastomosis
c. Ileostomy
d. Left colectomy
e. Permanent end colostomy
f. Resection of cecostomy

Procedure performed:

- Left colectomy. Hartmann pouch. Resection of cecostomy. Creation of end colostomy.

Pre-Op **Post-Op**

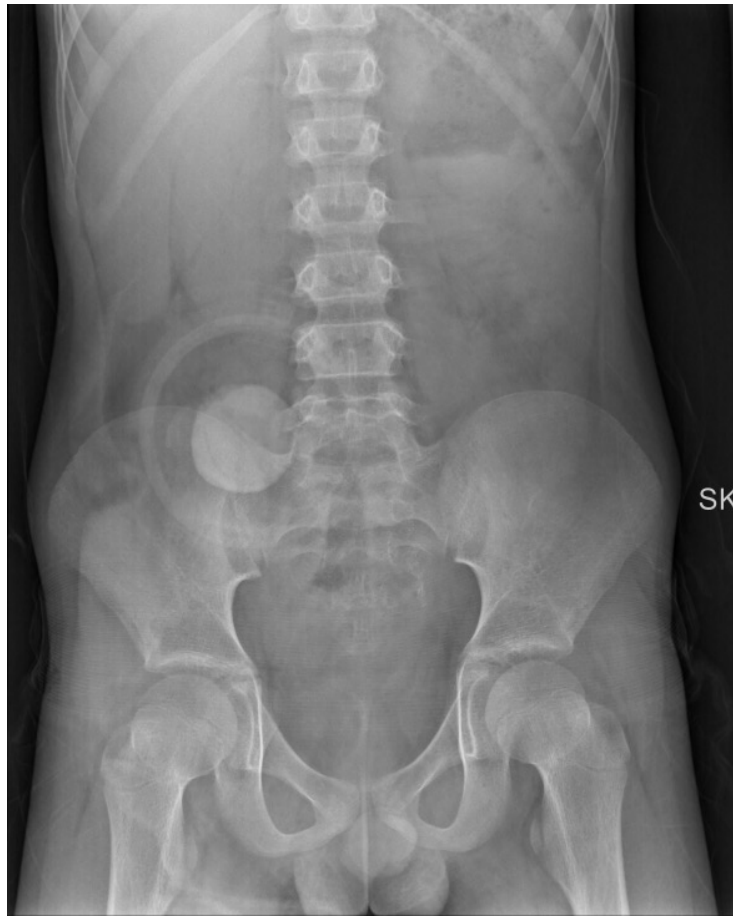




Follow-up

- Patient was discharged 10 days after last surgery. Eating, stooling through colostomy. Gaining weight

- **12y1m:** Doing great!



Thank you

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