

Rectal atresia



Isabella Bielicki, Lea Wehrli, Ulrike
Subotic, Stefan Holland-Cunz

Girl, 36+2 weeks of gestation

- **Birth weight 2.6kg, length 46cm, head circumference 34cm**
- 33 weeks of gestation
 - Prenatal US findings:
 - Bi-carotid aortic trunk
 - Polyhydramnion and **double bubble sign**
- 35 weeks of gestation
 - Amniocentesis and drainage of 2000ml
 - **46 XX, arr 5q33.3q34 (6.2Mb)**

Clinical findings

- Facial dysmorphism (low set ears, lateral downward deviation of the lid axis)
- Bilateral partial cutaneous syndactyly of the toes II/III
- **Nurses report difficulties to pass the rectal temperature probe farther than 1cm**
- **Clinical exam with a normal looking anus**

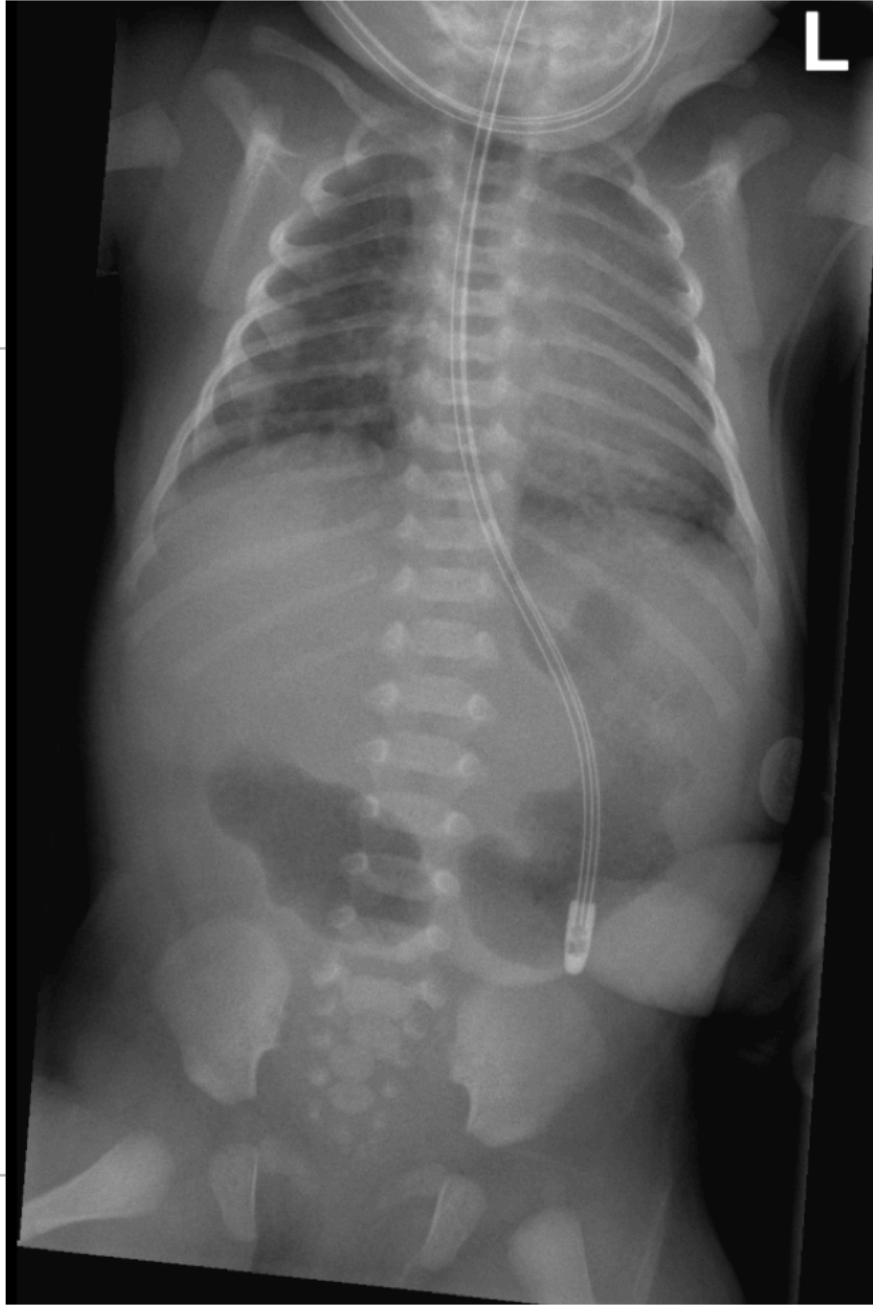


What diagnostic workup would you do?

- a) ECHO
- b) US Head
- c) Babygram
- d) US spinal cord
- e) All of the above

Workup

- X-ray pelvis: **Abnormal sacral segmentation S2/S3**
- ECHO: **Bicarotid aortic trunk and ASD**
- US head: normal
- US abdomen: normal kidneys, **fluid filled stomach and duodenum**, collapsed small bowel
- US spine: normal spine and cord, no signs of tethering, no presacral mass



What kind of ARM do you suspect?

- a) Anal atresia without fistula
- b) Anal atresia with fistula
- c) Rectal atresia
- d) Posterior cloaca

Age of 3 days

- Intraoperative examination
 - Anus normal with good circumferential sphincter contractions
 - Anus can be easily intubated with a Hegar of 11 but not farther introduced than 2cm
 - Distal rectum blind ending 2 cm above the pectinate line

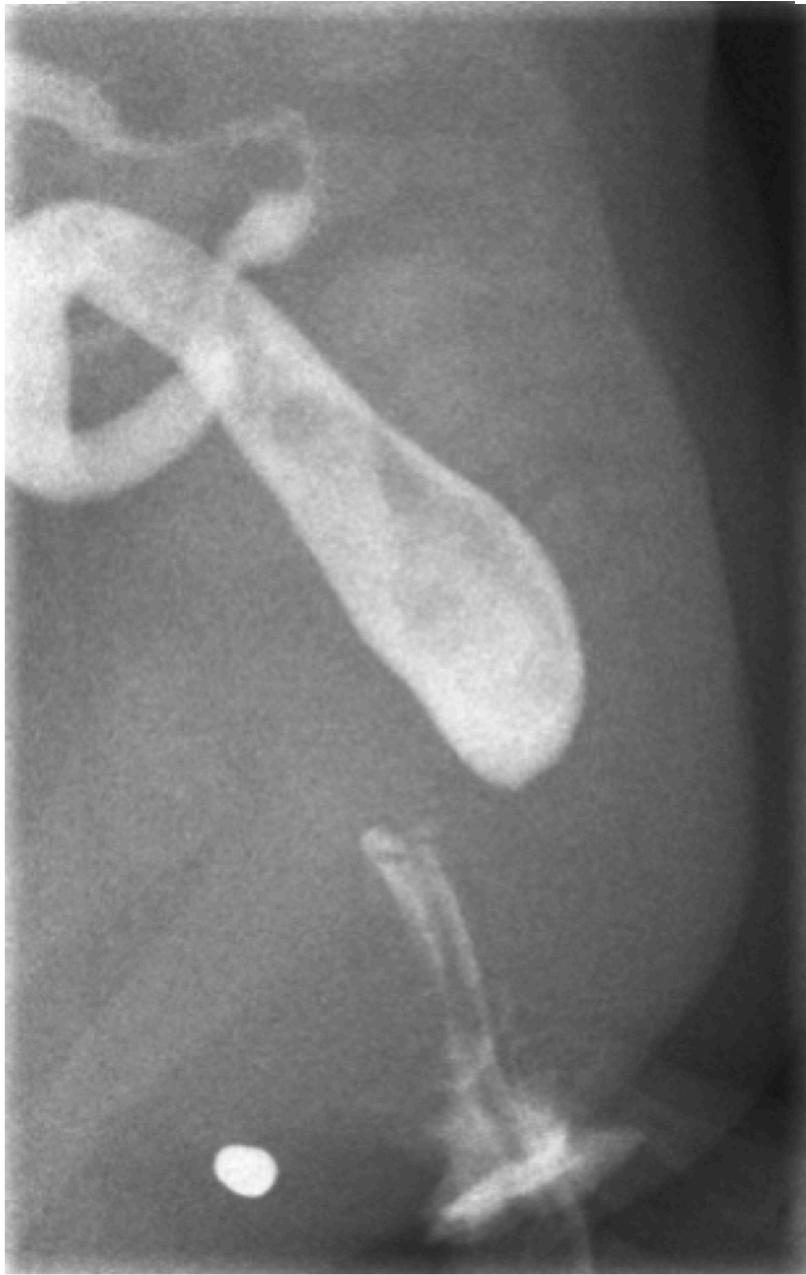
Age of 3 days

Diagnostic laparoscopy with conversion to midline laparotomy

- Duodenoduodenostomy
- Descending colostomy

What diagnostic workup would you do?

- a) Contrast enema and distal colostogram
- b) Distal colostogram while having a Hegar inserted through the anus
- c) MRI pelvis
- d) US of the perineum

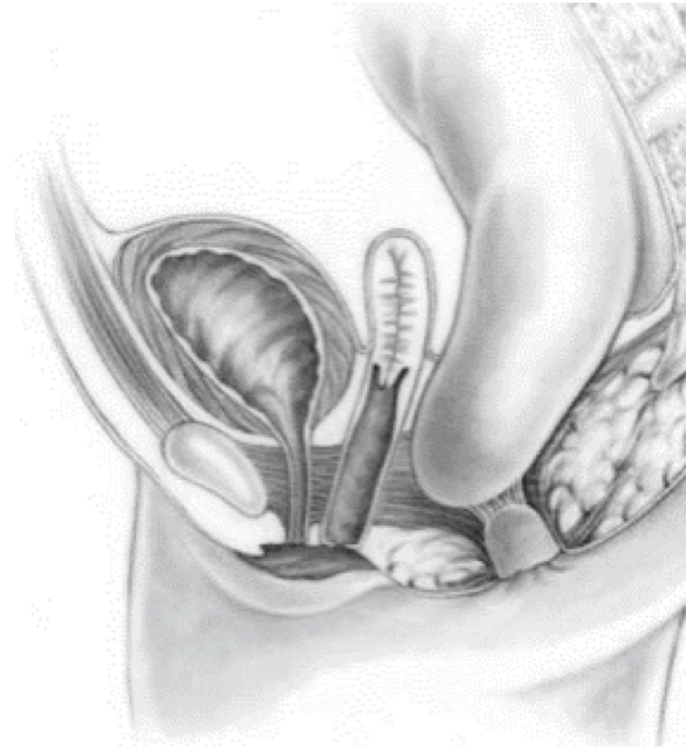


How would you surgically approach it?

- a) Transanal resection and end-to-end rectorectal anastomosis
- b) PSARP
- c) Laparoscopic assisted transanal resection and end-to-end rectorectal anastomosis
- d) I don't know

Surgical treatment at age of 6 months

- The patient underwent a laparoscopic-assisted transanal resection
- Intraoperatively the distal rectum was in continuum to the proximal rectum separated by a septum
- Starting rectal dilations 2 weeks postoperatively



A.Pena, A.Bischoff, Surgical treatment of Colorectal Problems in Children, DOI 10.1007/978-3-319-14989-9_14