CHILD SURGERY II.

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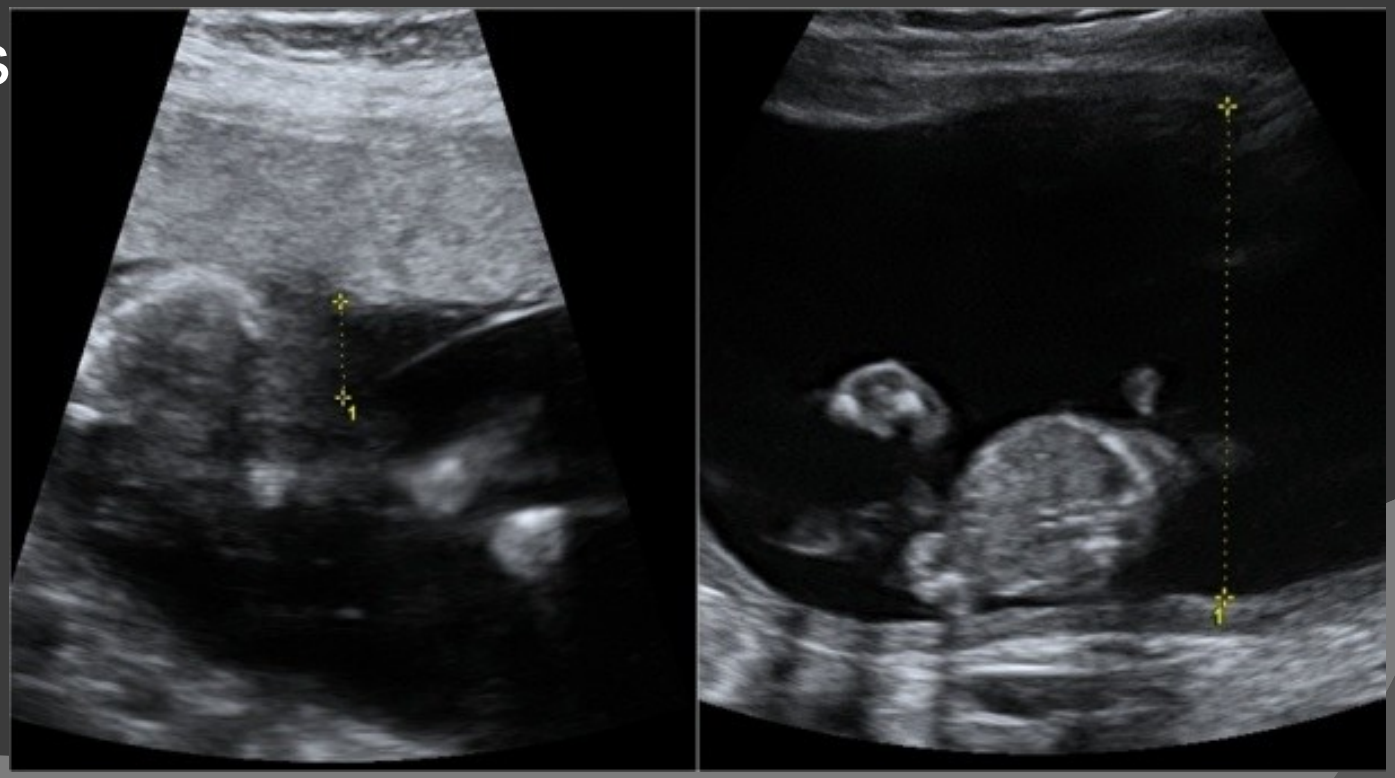
Diagnosis 1

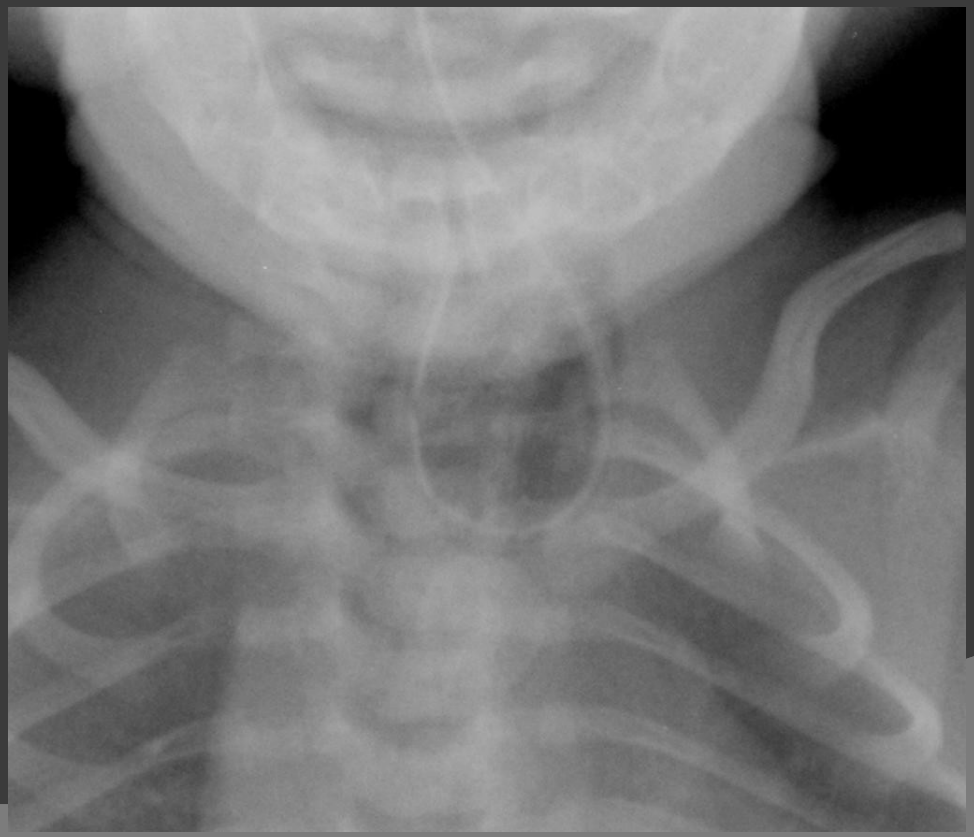
- eutrophic newborn, PNV 51cm/3450g
- prenatally: polyhydramnios
- pos



Diagnosis 1

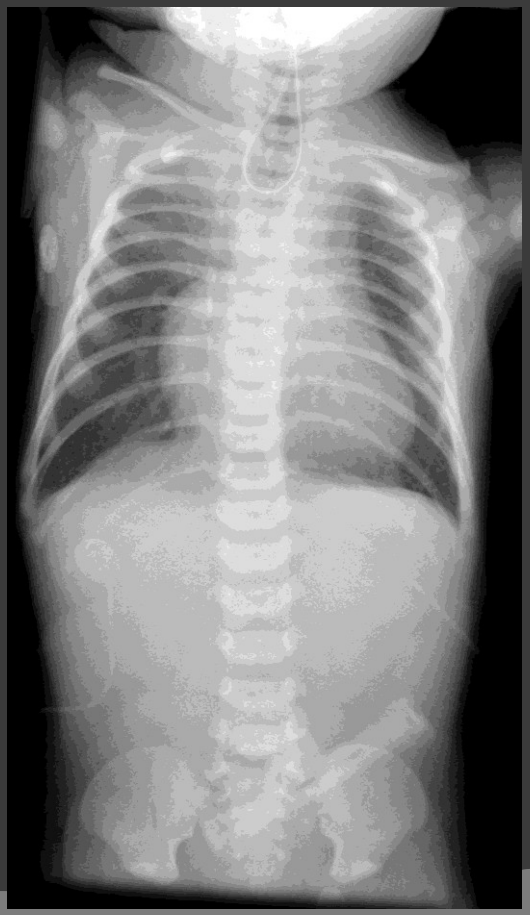
- Put gastric probe

IMPOSSIBLE, collides with resistance



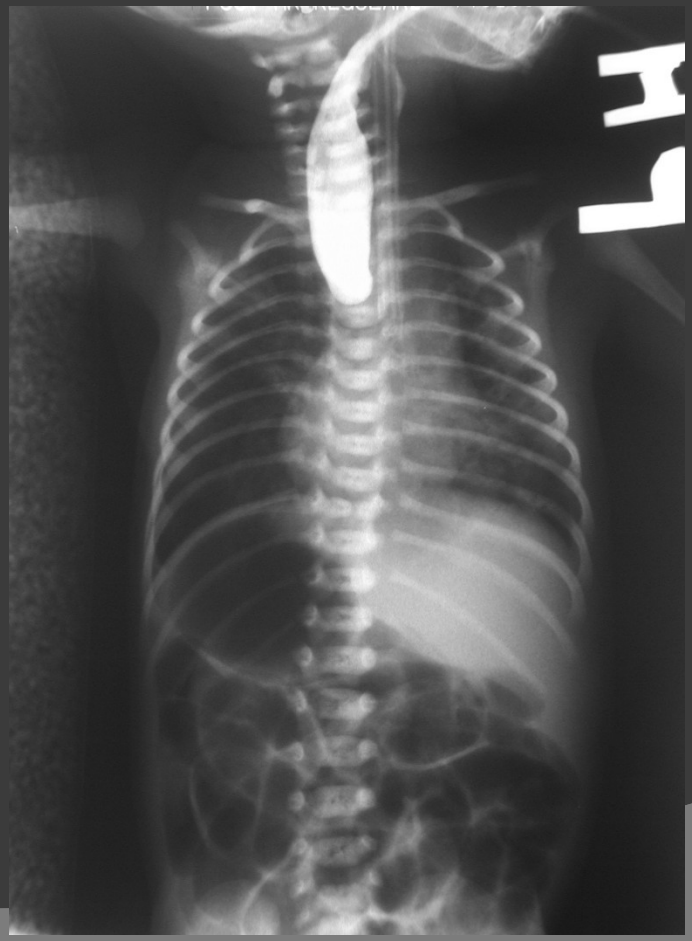
Diagnosis 1

- Thorax and abdomen X-ray



Diagnosis 1

- X-ray examination with contrast (what ?)



OESOPHAGUS ATRESIA

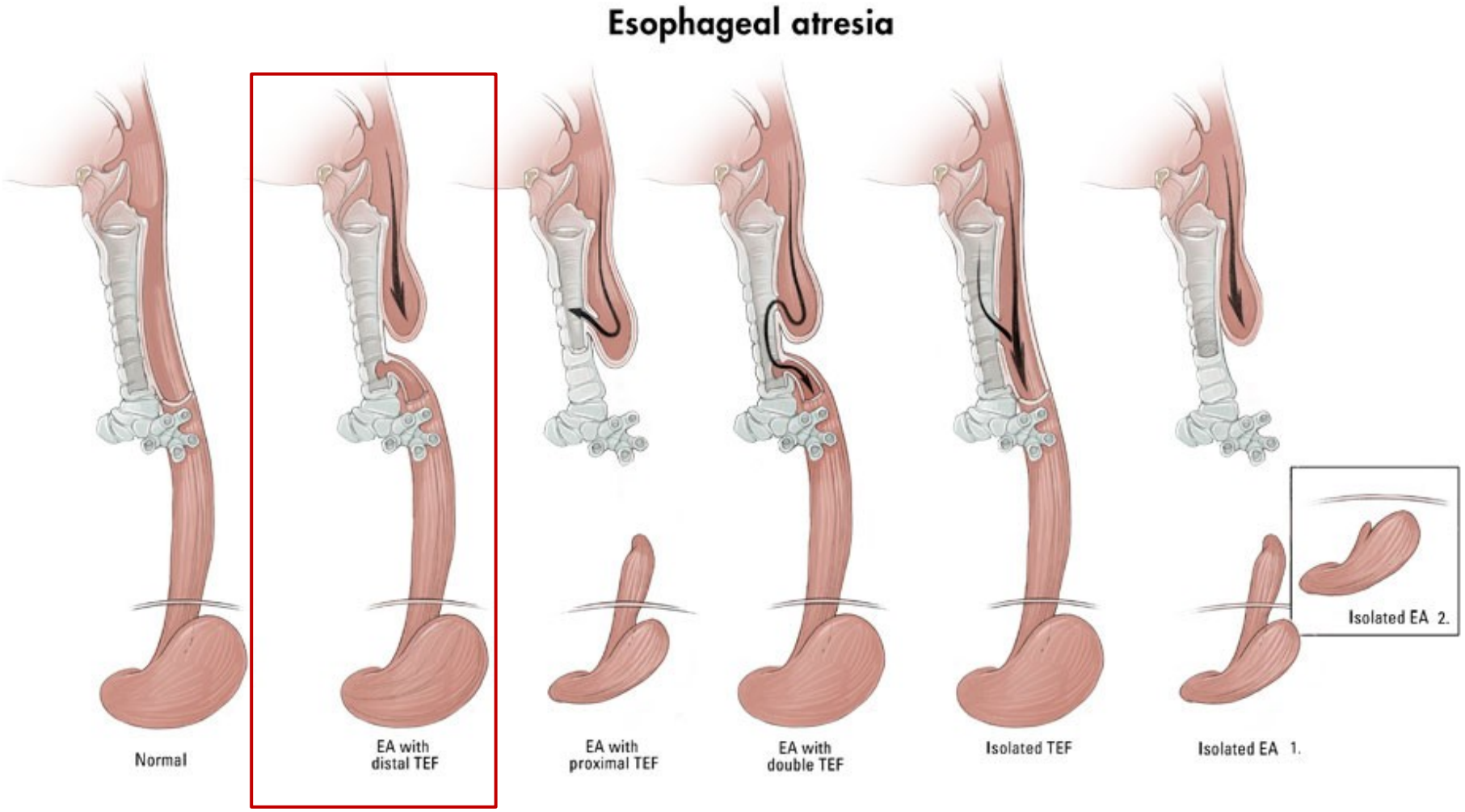
Associated developmental disorders

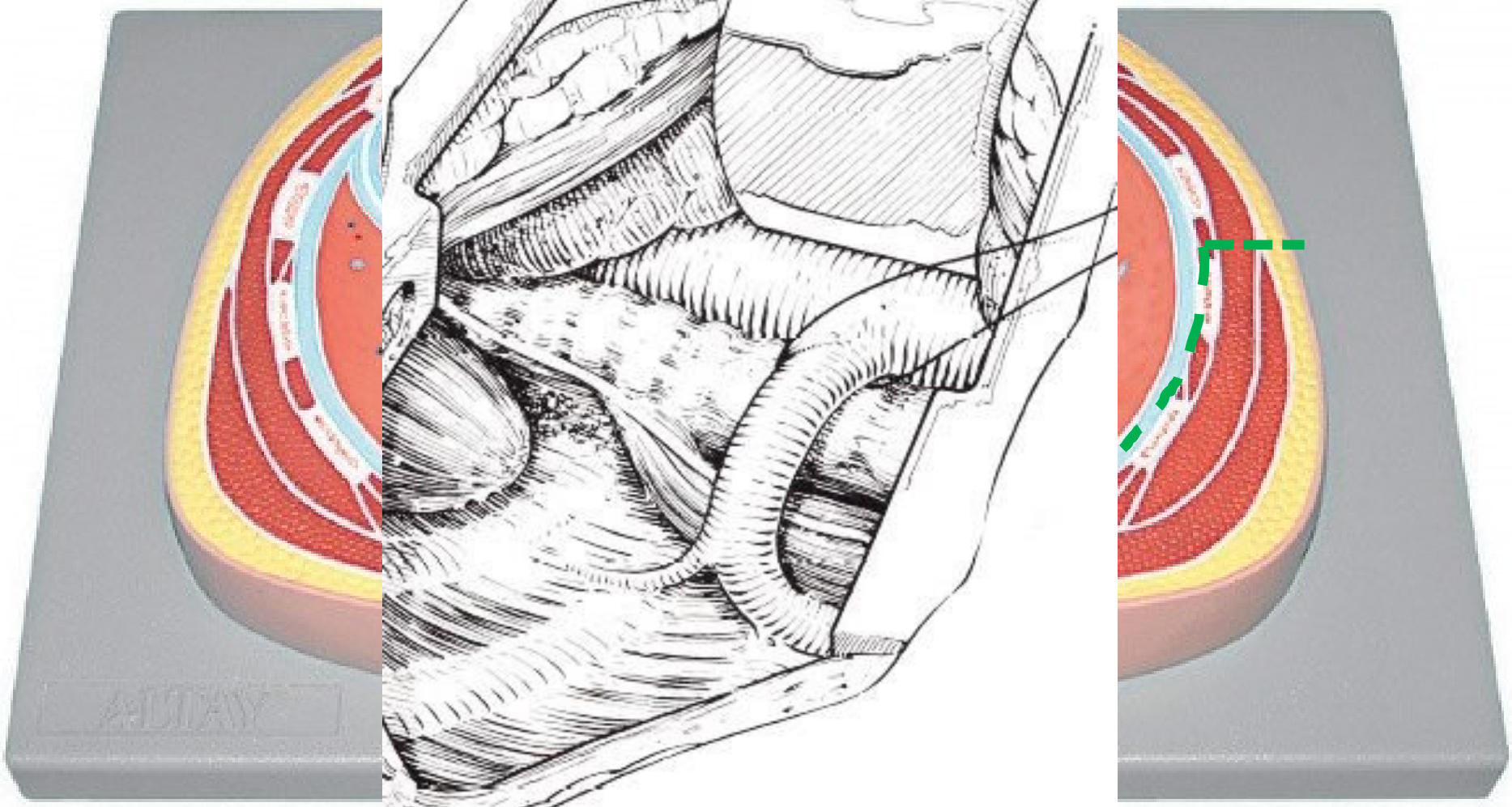
- Oesophagus atresia is usually associated with another disorders up to 50% - **VACTERL syndrome**.

VACTERL syndrome

V - vertebral
A - anorectal (10%)
C - cardiovascular (25%)
T - tracheal
E - esophageal
R - renal (10%)
L - limb

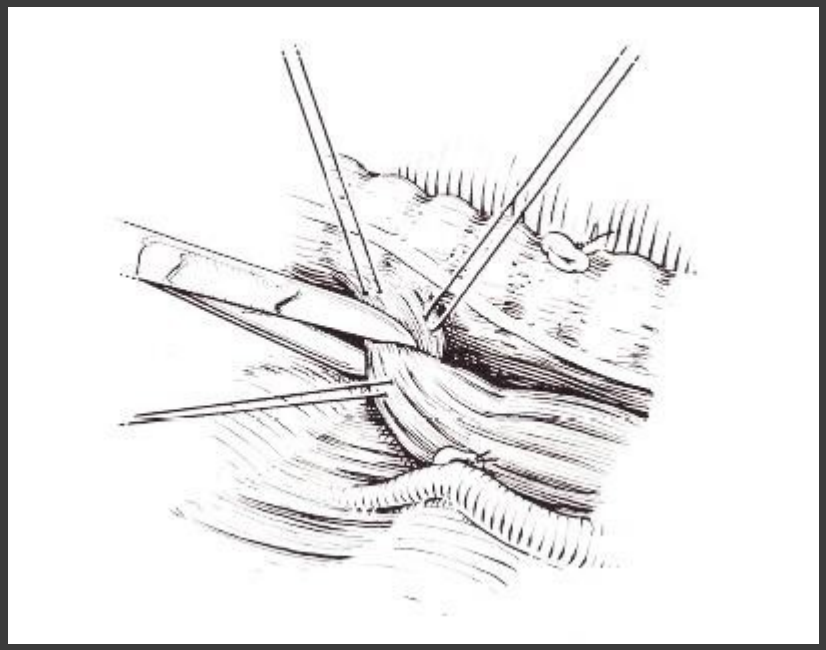
Classification

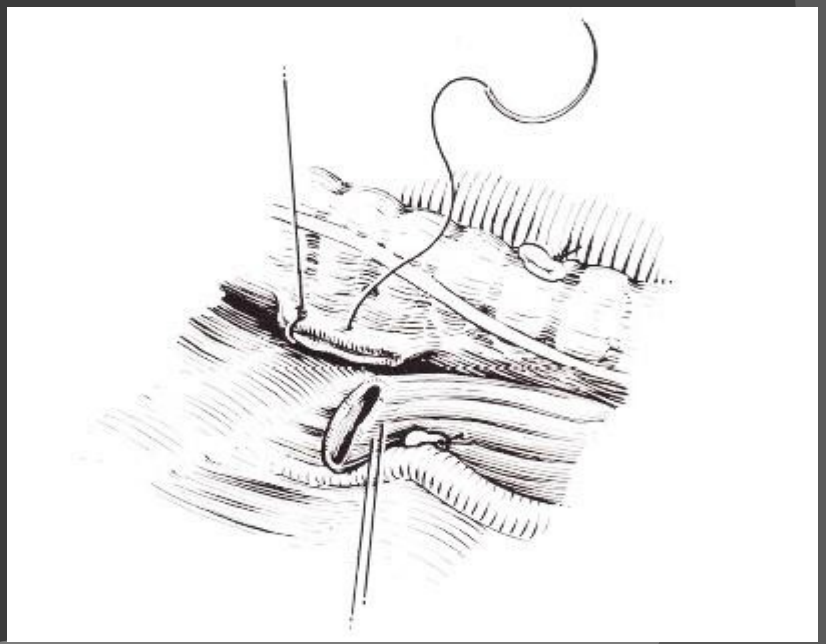




Operative technique

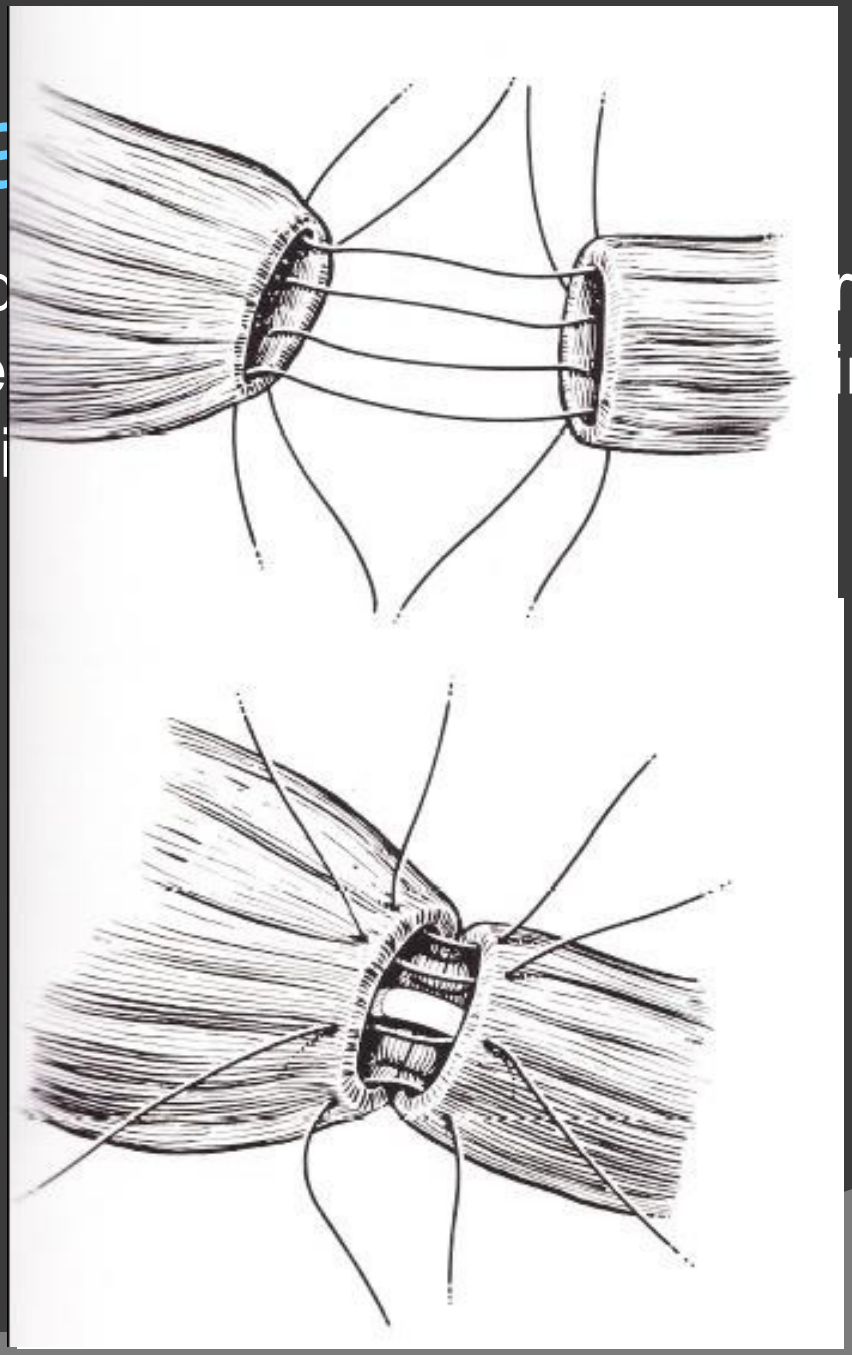
- Tracheoesophageal fistula interruption and tracheal defects closure





Opera

- Upper anc release, finishing e inserted nasogastri



Operative technique

Solution methods Long-gap *(gap > 3 cm)*:

Suggestions ?

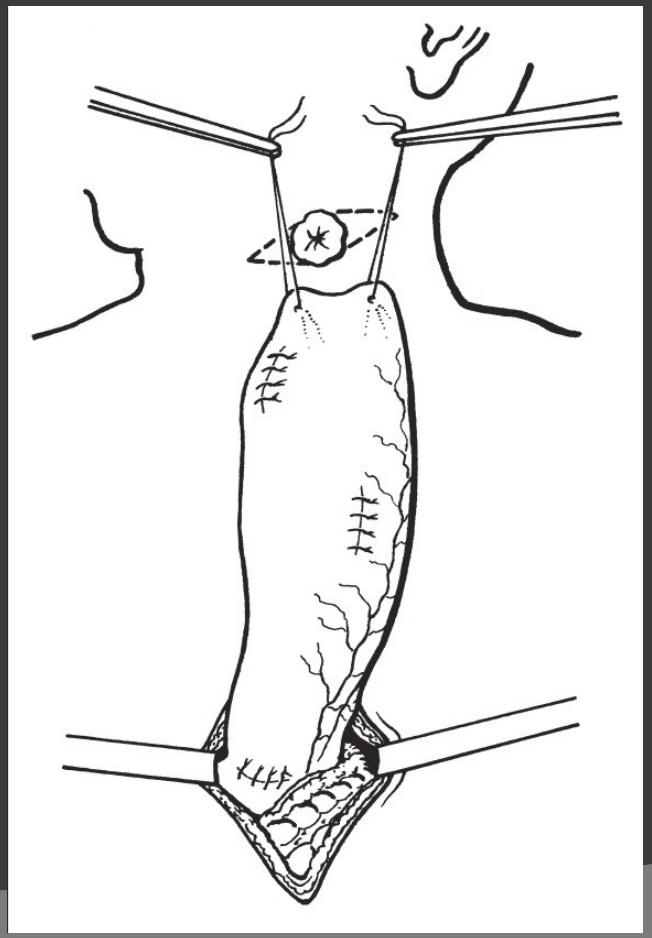
- Anastomosis under tension (dehiscence risk)
- Postponed anastomosis

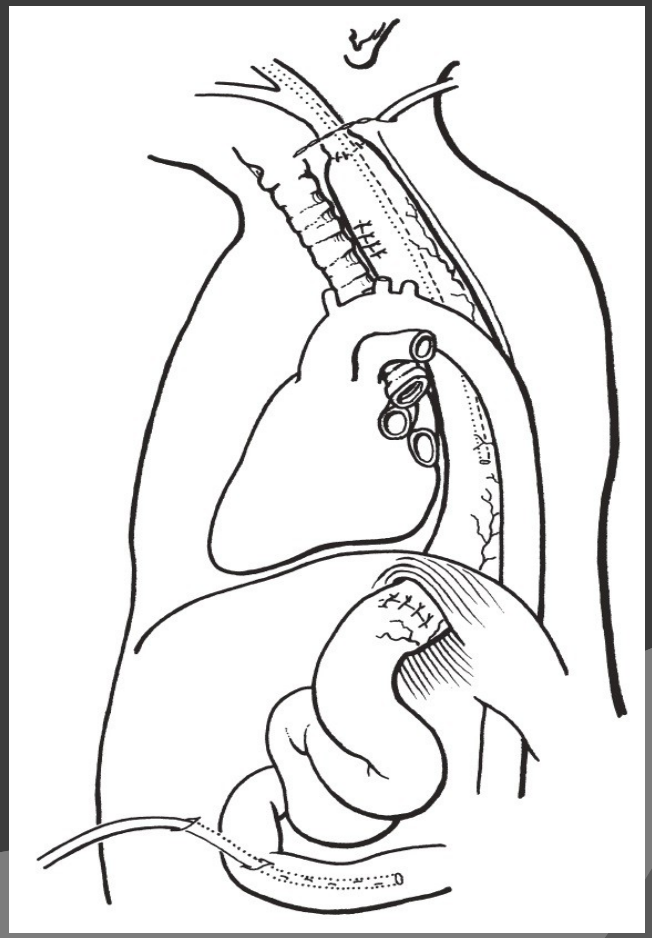
  (6-12 weeks of upper stump bougie elongation)
- Esophagostomy, gastrostomy and postponed substitution
- What the substitution options are ?

  (colon interposition, tubularized part of stomach, small intestine replacement, the whole stomach replacement + pyloroplasty (according to Spitze) – most common at children, in the Czech Republic sinde 1992, advantages – easy procedure, good vascular supply, low fistula and stricture presence)

Operative technique

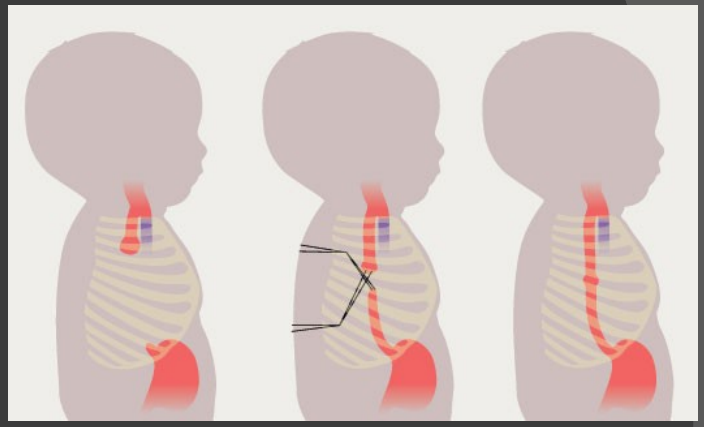
- The hole stomach discarded replacement

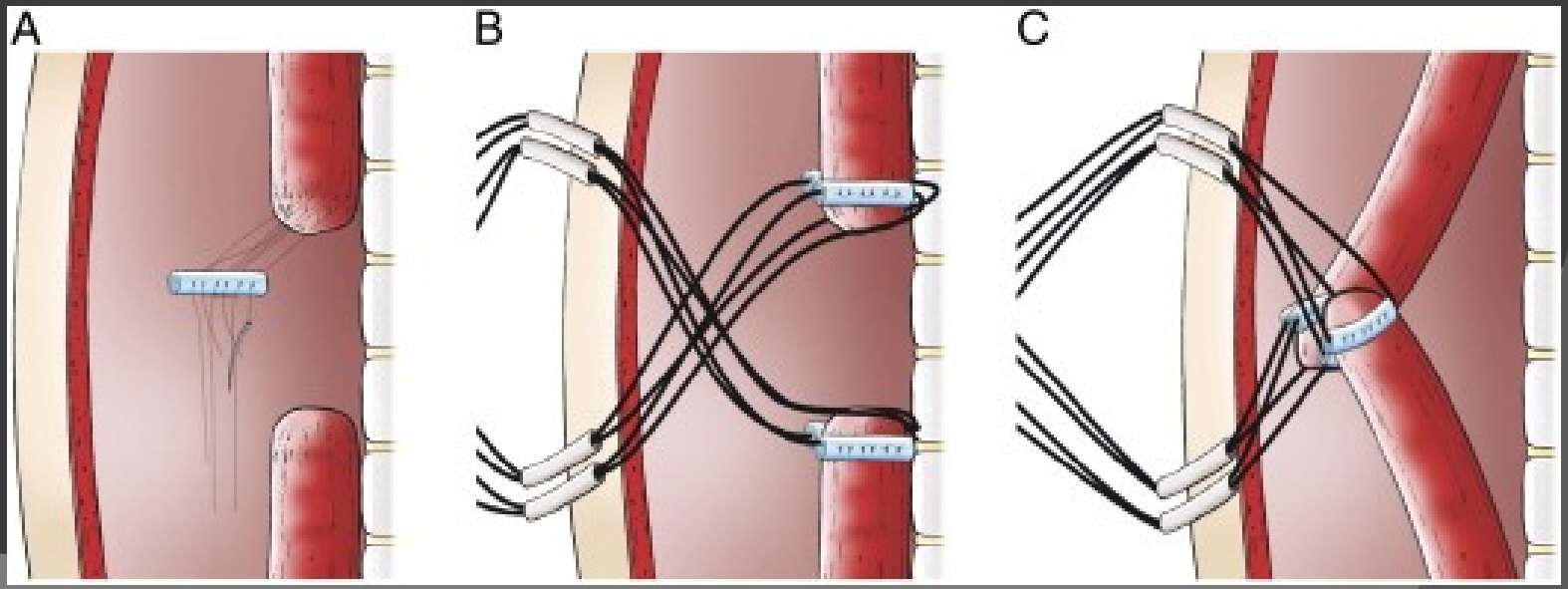




Operative technique

- Fokker system:
- stump prolongation method secondary anastomosis





Diagnosis 2

- eutrophic newborn, more often a boy,
  PNV 51cm/3450g
- Beginning of 3rd-6th week of life, not beneficial, bow vomiting during each dose

NEXT PROCEDURE ?

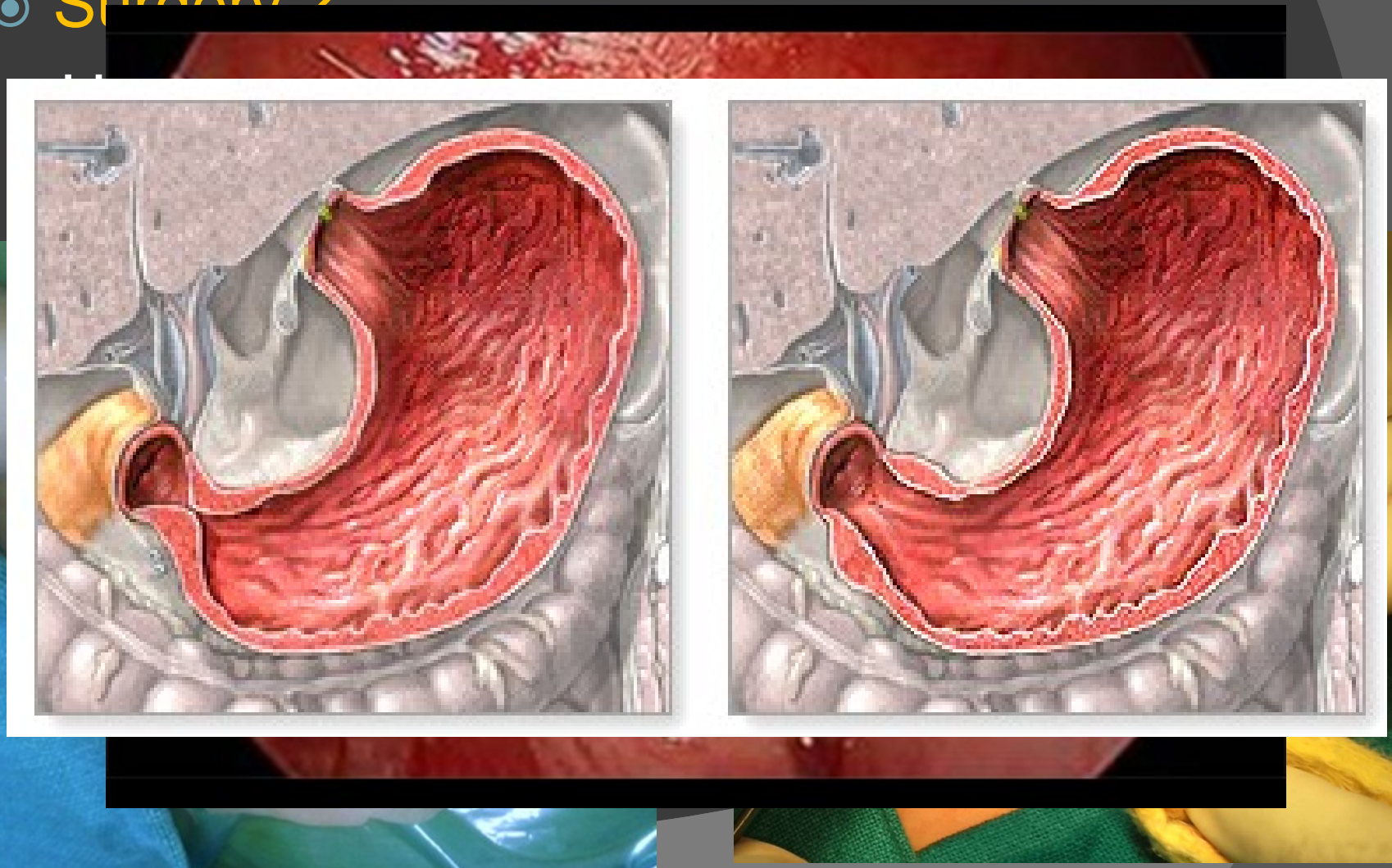
Diagnosis 2

- Abdomen ultrasound

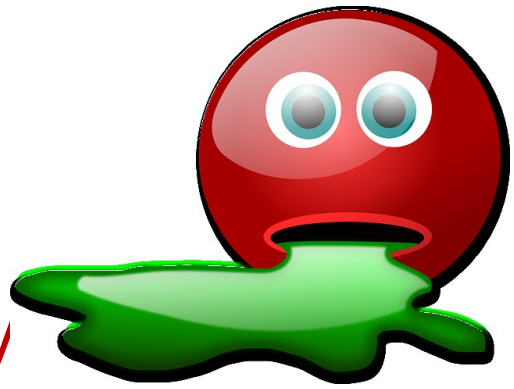
HYPERTROPHIC PYLORIC STENOSIS

Hypertrophic pyloric stenosis

- Surgery 2



VOMITING



Beginning ?

Shortly after delivery

Characteristic ?

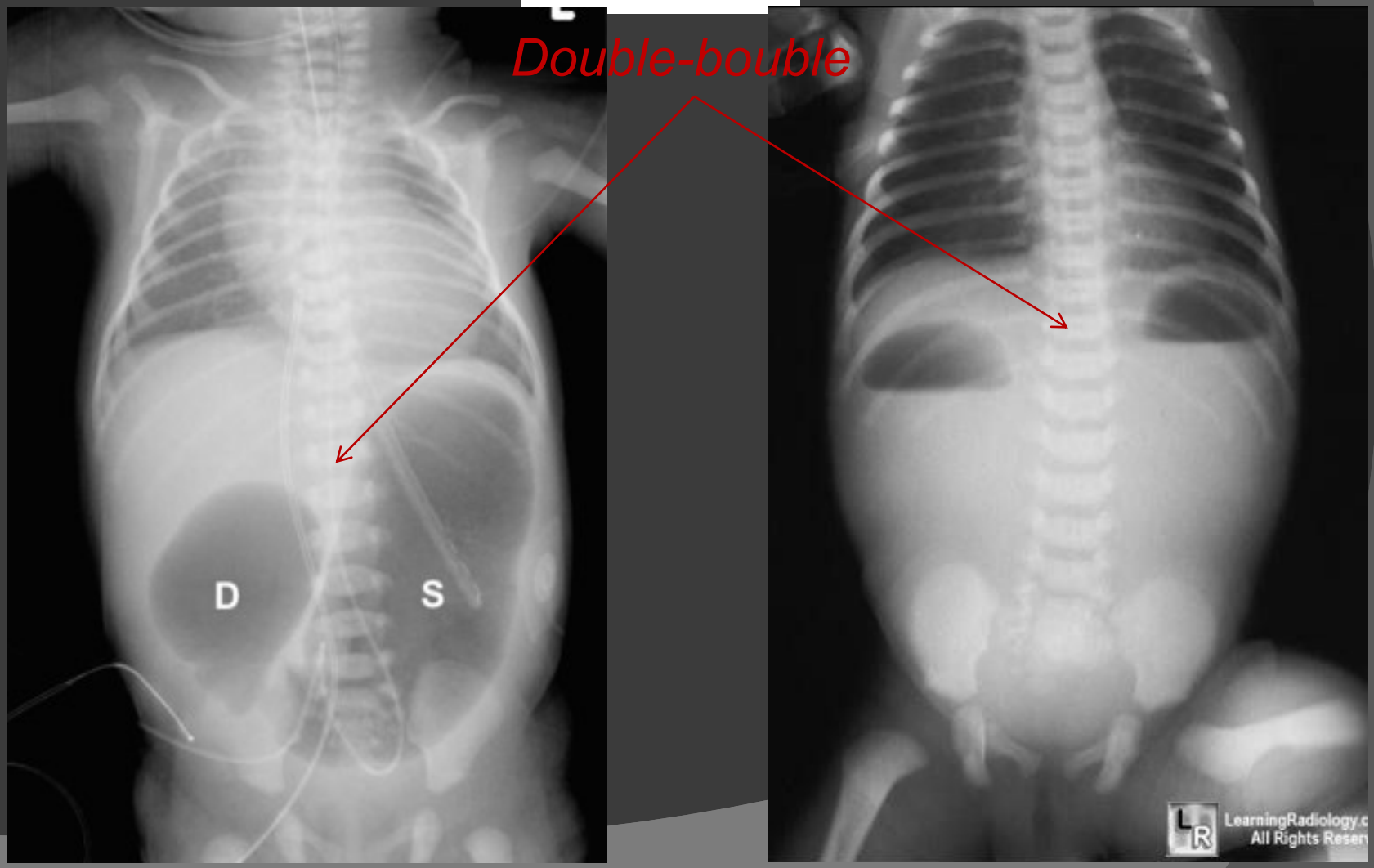
Bow vimiting

Admixture ?

Gall admixture

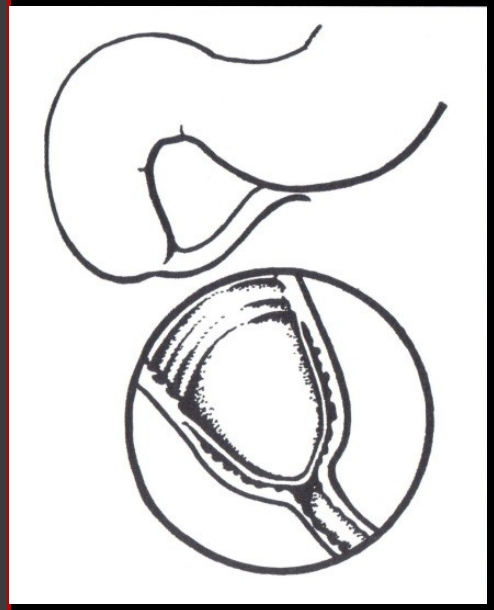
NEXT PROCEDURE ?

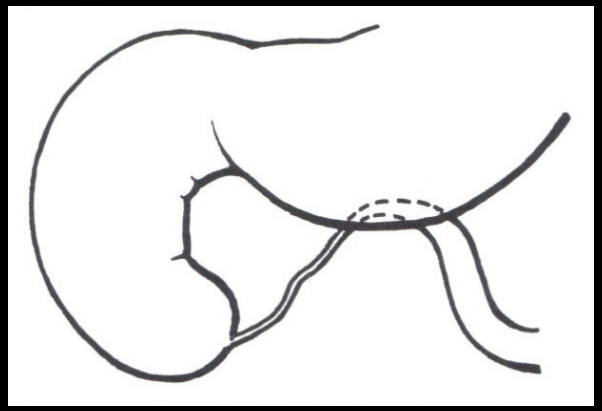
Diagnosis 3

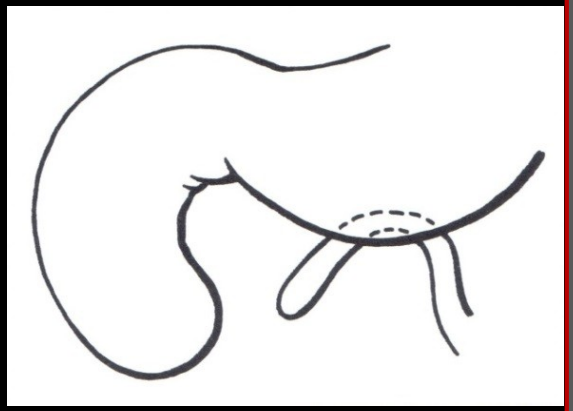


DUODENAL ATRESIA

Division

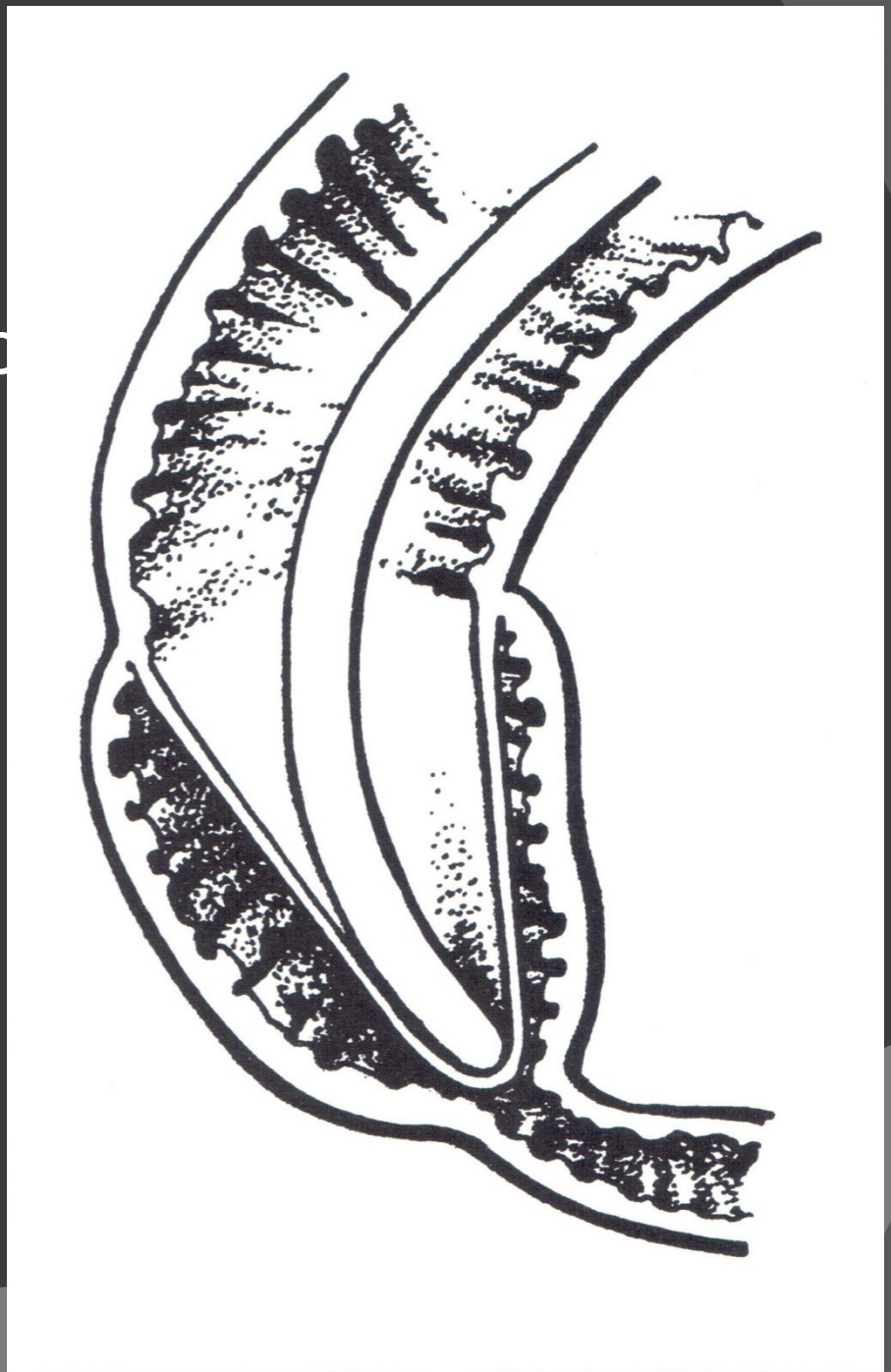






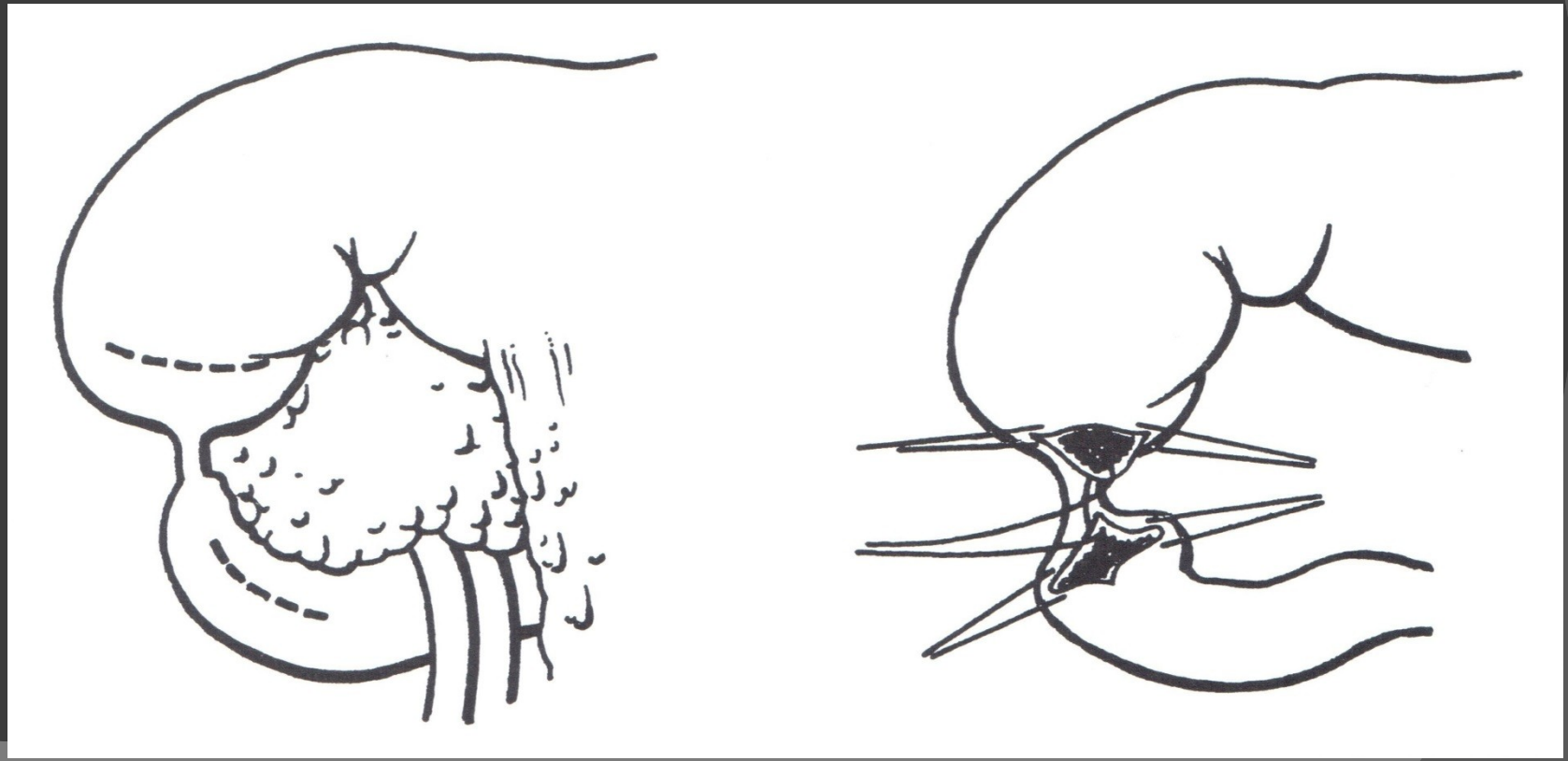
Treatment?

- Membrane excisio



Treatment ?

- Duodeno anastomosis („diamond suture“)



ICTERUS

Type of icterus ?

Cholestatic - obstructive

Start of symptomes ?

Days – weeks after delivery

Consenquences ?

Biliary cirrhosis, hepatic collapse

NEXT PROCEDURE ?

Diagnosis 4

- Anamnesis

  delivery mechanism, asphyxia,
  infective diseases and metabolic defects exluding

- Clinical state

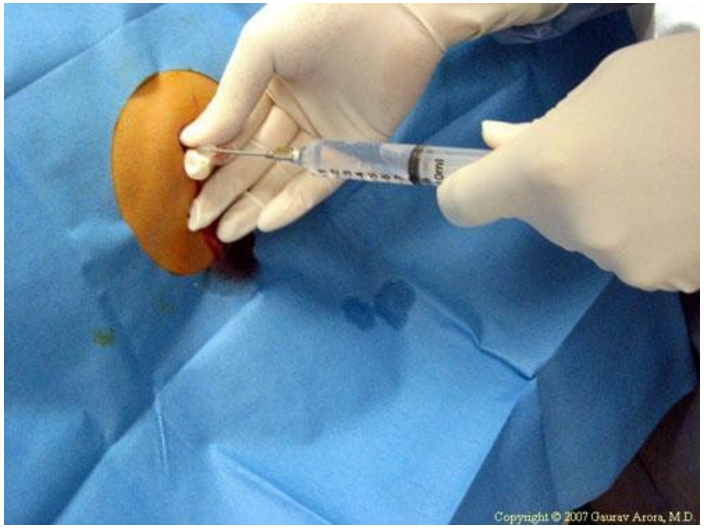
  apathy, dyspnea, tachycardia,
  the time of the start or icterus persistence (14 days)

- Laboratory examination

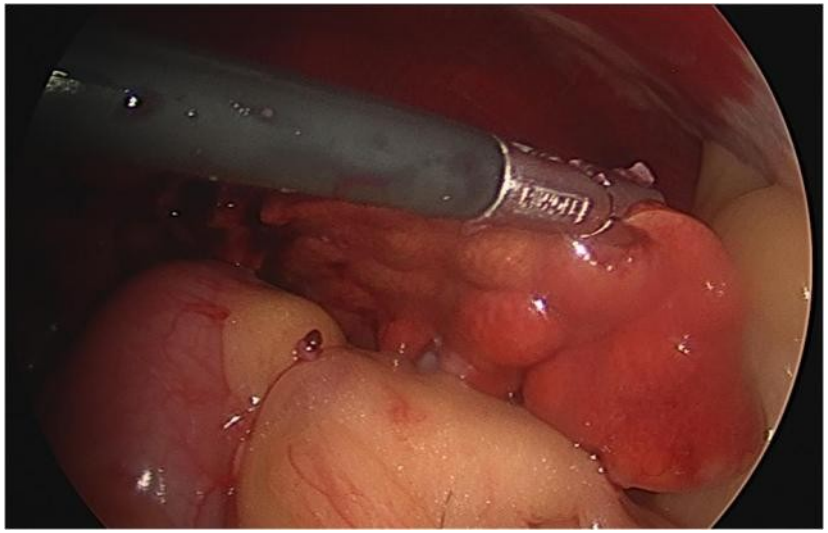
  BC, conjugated bilirubin, HT, CRP, BT + Rh

Hepatic biopsy

puncture

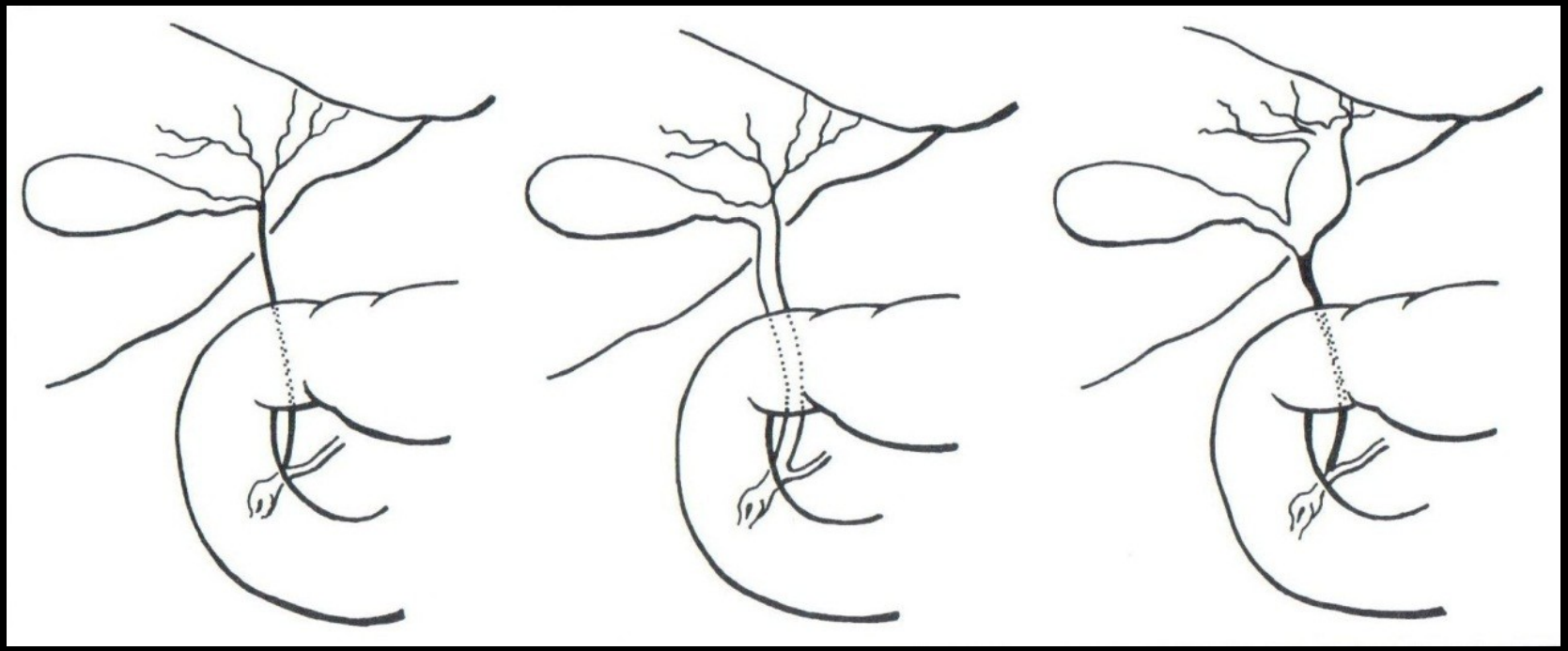


laparoscopic

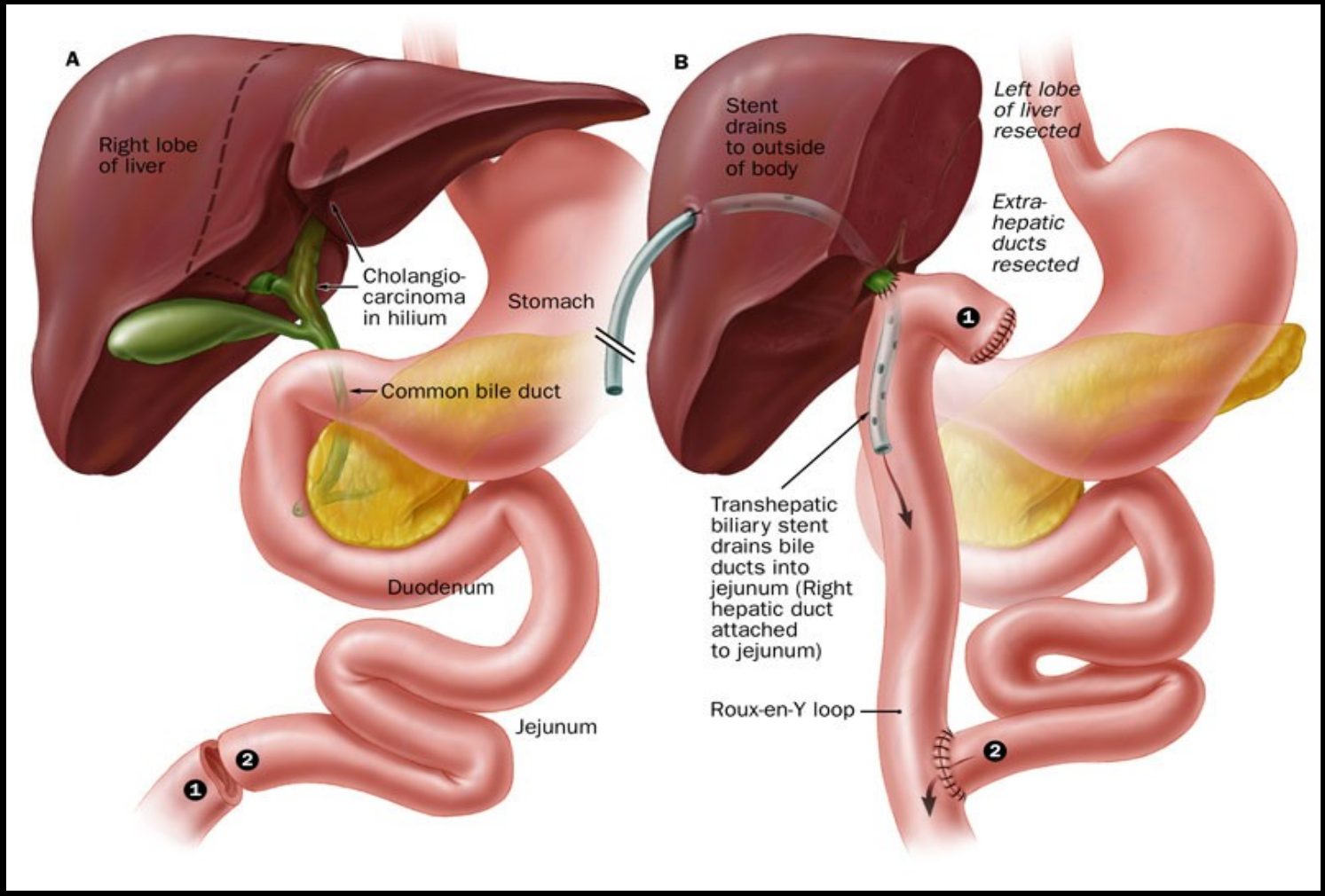


BILIARY TRACT ATRESIA

Division



Excluded jejunal loop – Y-Roux



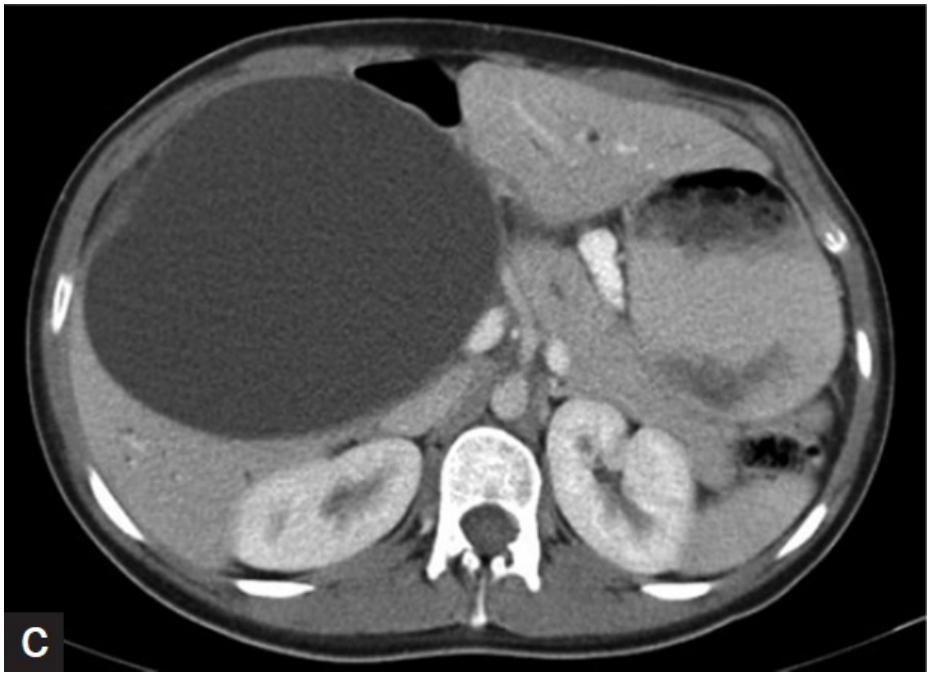
Diagnosis 5

- eutrophic newborn

- postnatally: at first, a physiological newborn
  growing icterus
  stomach ache
  palpable resistance in R mesogastrium

NEXT PROCEDURE ?

Diagnosis 5



Diagnosis 5

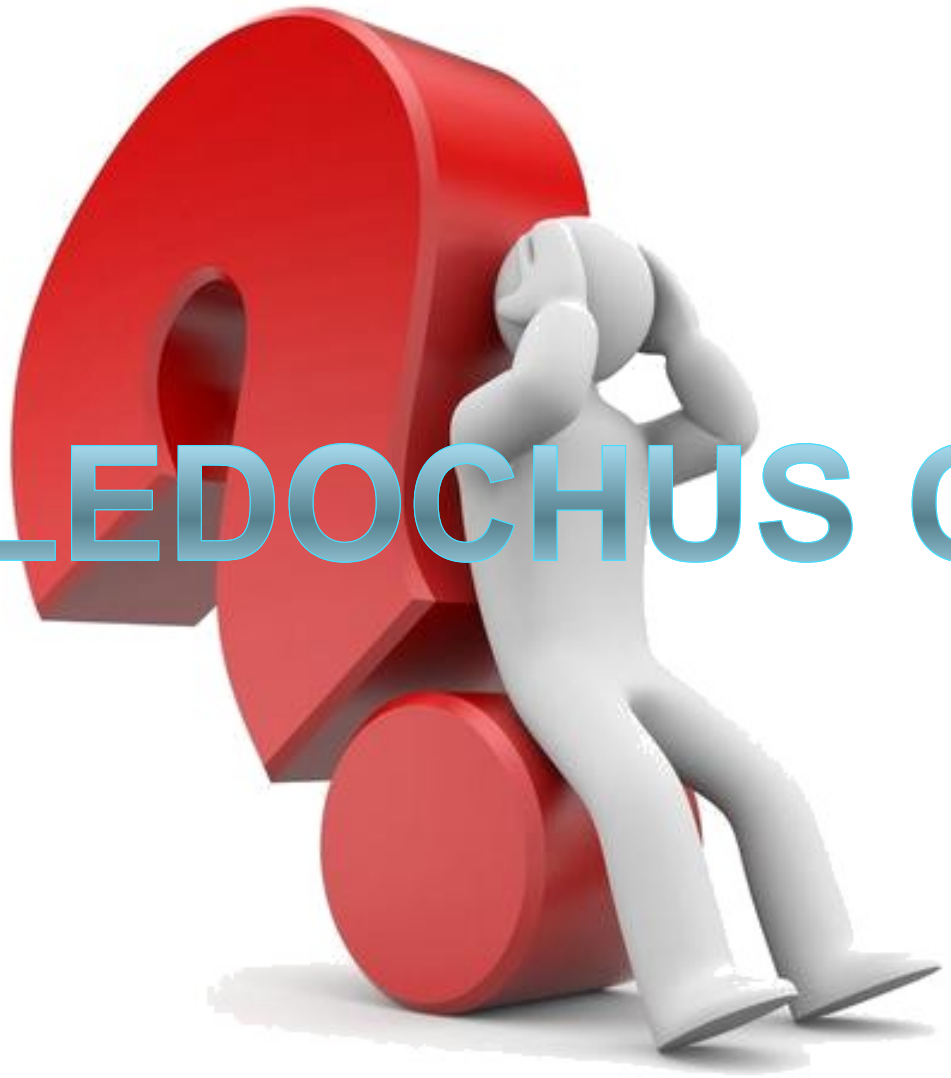
- Laboratory finding ?

  Bilirubin elevation, HT, AMS, CRP

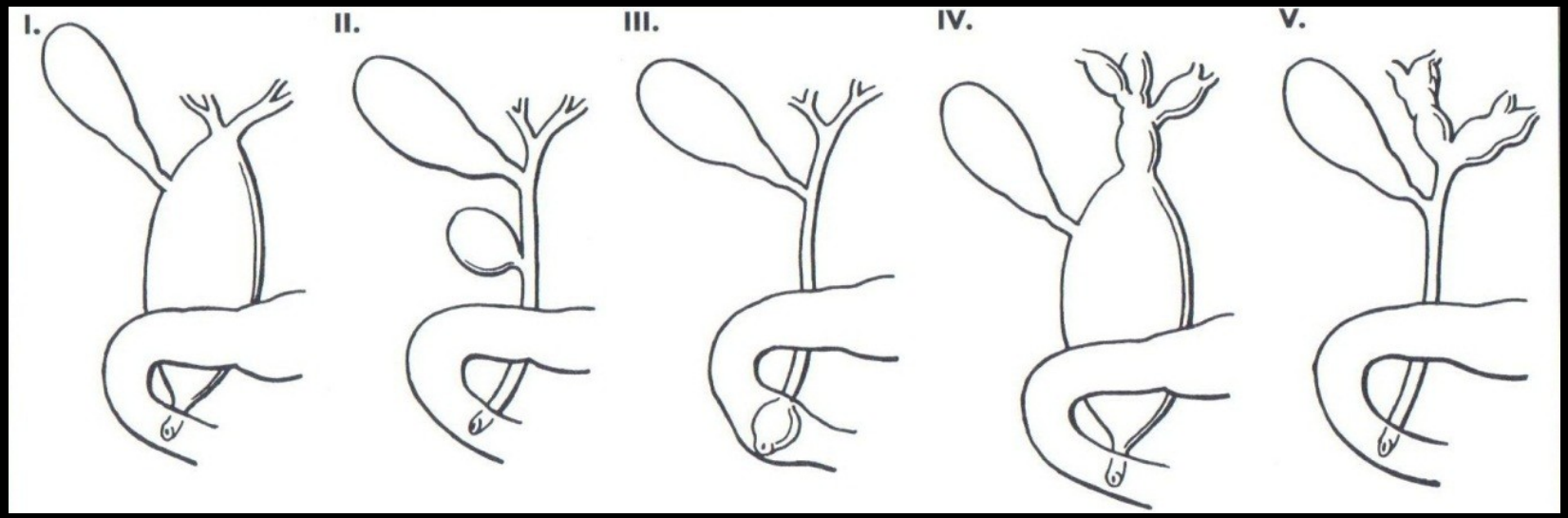
- Complication ?

  rupture, pancreatitis, malignization

CHOLEDOCHUS CYST

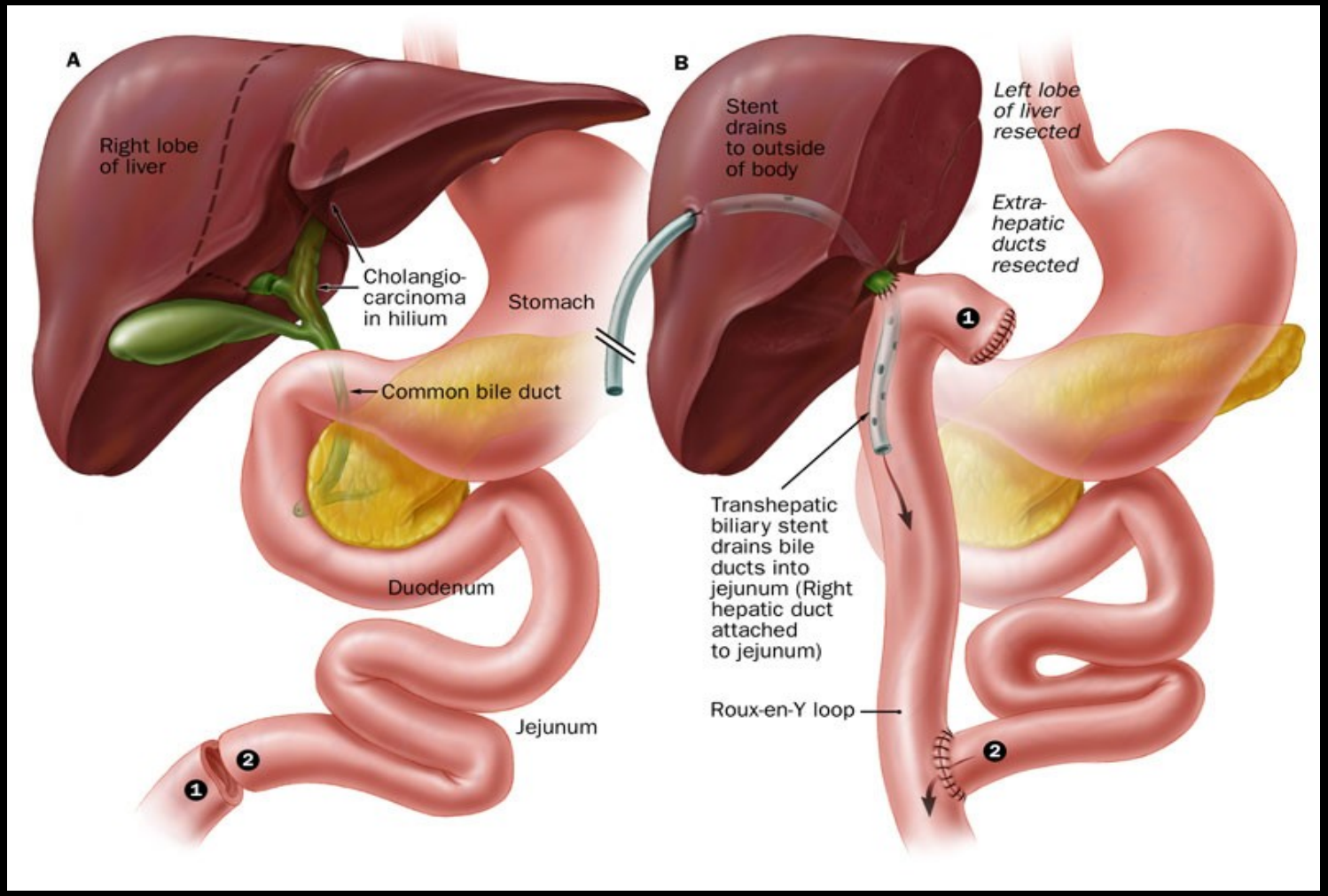


Todani classification



Treatment

Excluded jejunal loop – Y-Roux



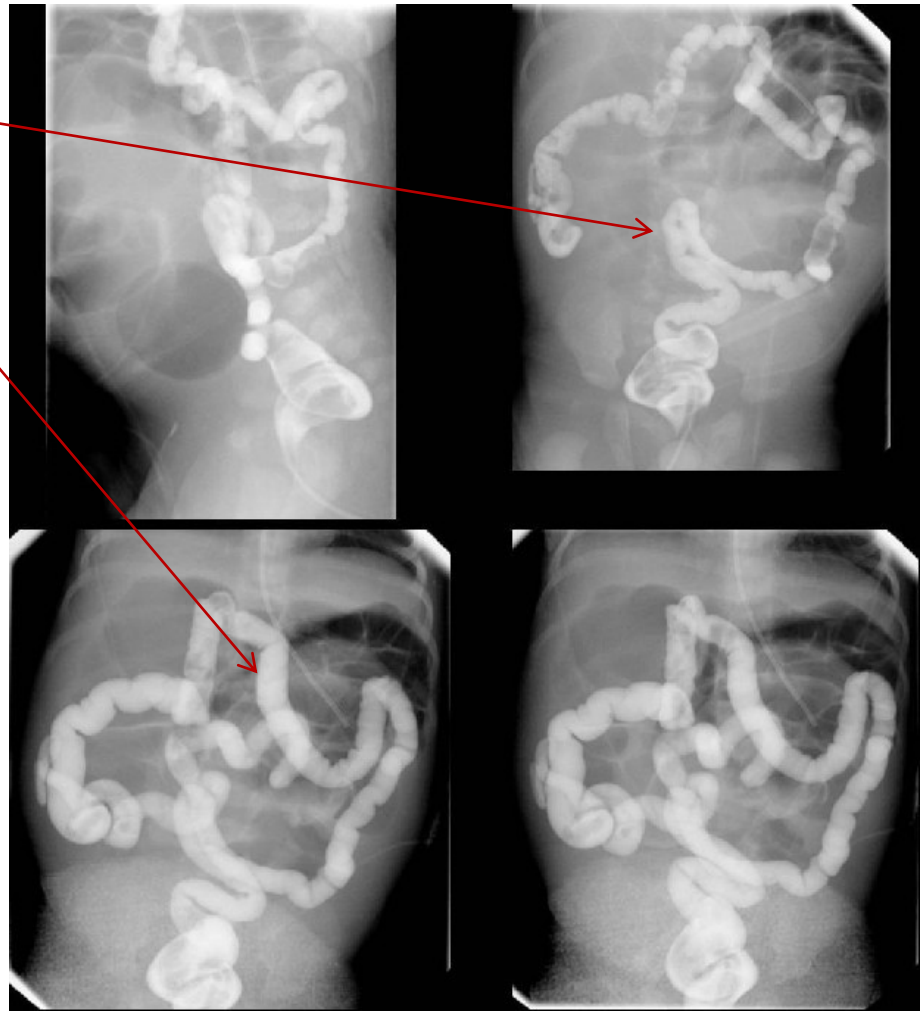
Diagnosis 6

- eutrophic newborn, PNV 51cm/3450g

- prenatally: polyhydramnios
- postnatally: progressive vomiting
  abdomen above niveau
  meconium does not leave

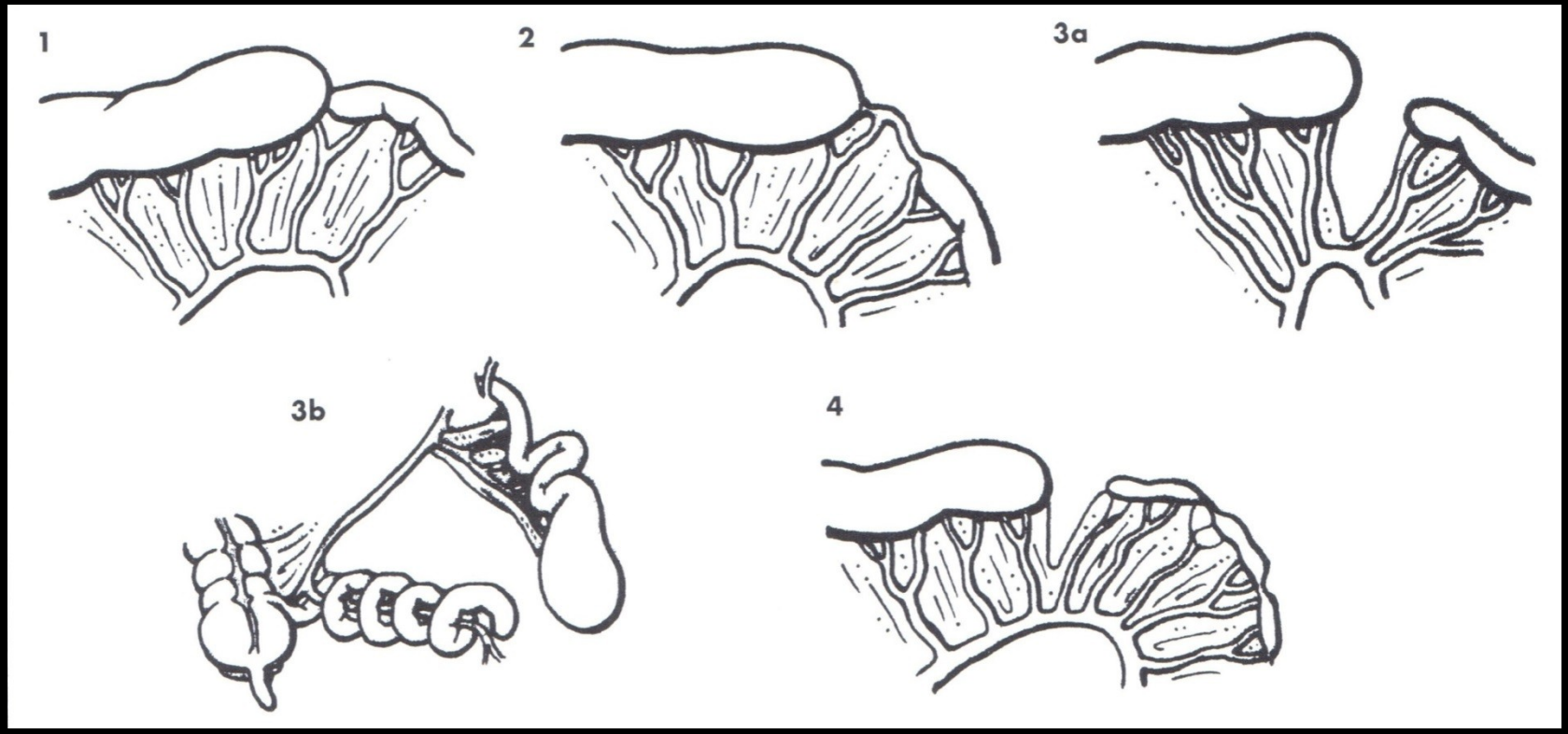
NEXT PROCEDURE ?

Microcolon



SMALL AND LARGE INTESTINE ATRESIA

Small intestine atresia



Large intestine atresia

- Rare
- Most frequently after intrauterine NEC

Treatment:

- Resectin of affected part and intestine continuity renewal by end-to-end anastomosis
- Certainty of presence of ganglionar part

Diagnosis 7

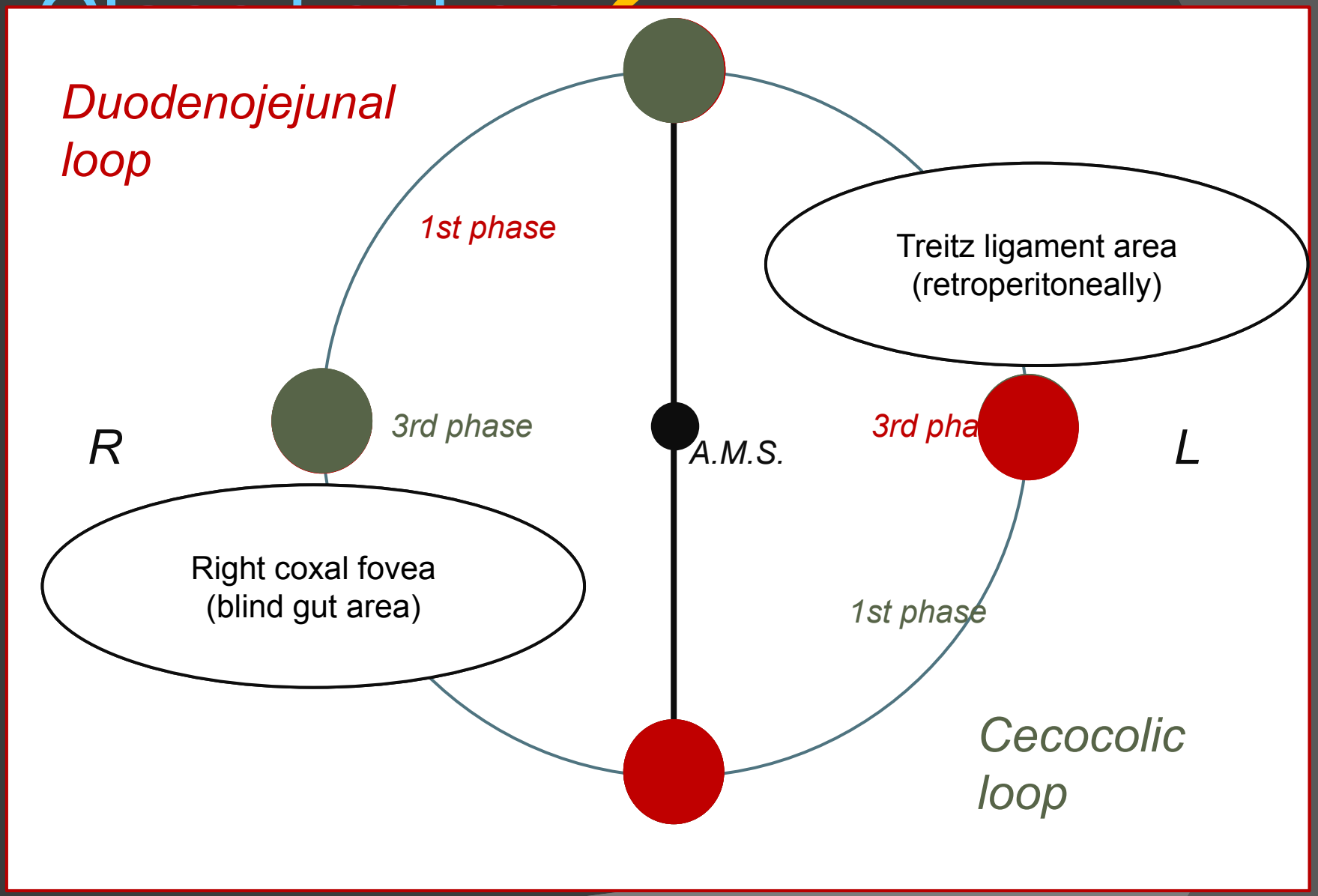
- eutrophic newborn, PNV 51cm/3450g
- postnatally: vomiting with gall admixture
  (start on 3rd-4th day after delivery)
  abdomen above niveau
  obstipation and stomach ache

ANOTHER PROCEDURE ?

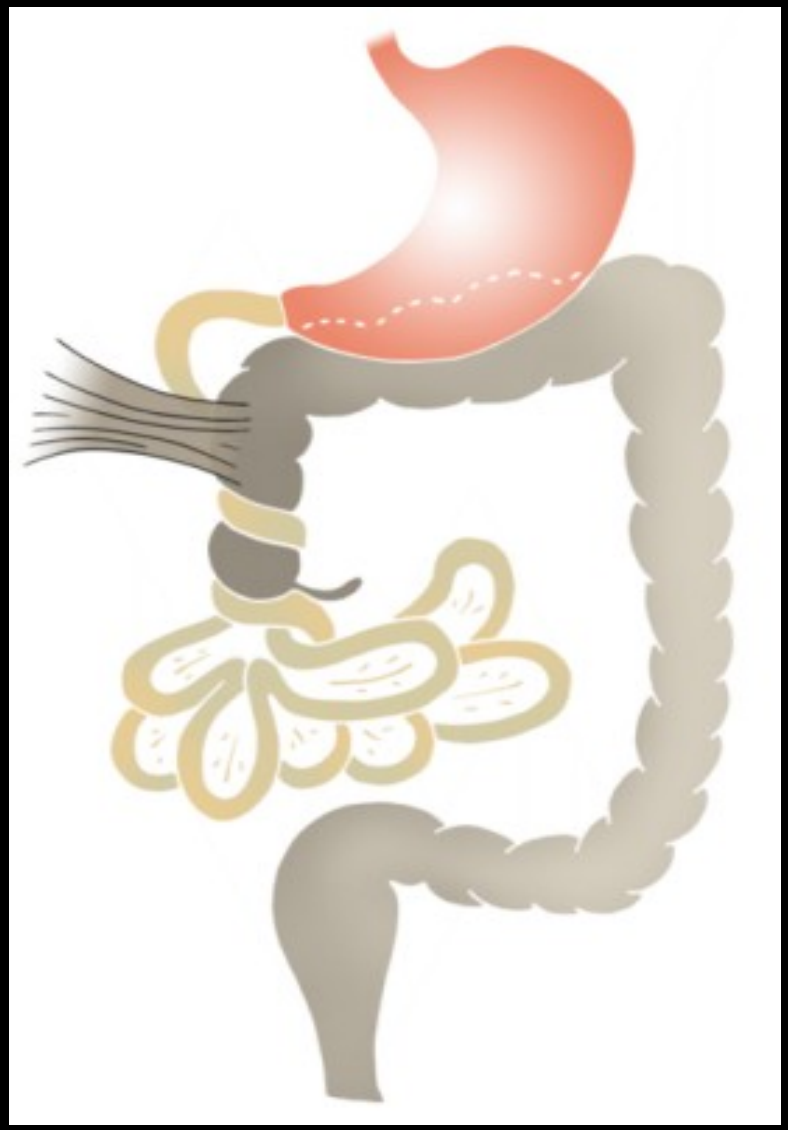
Corkscrew sign

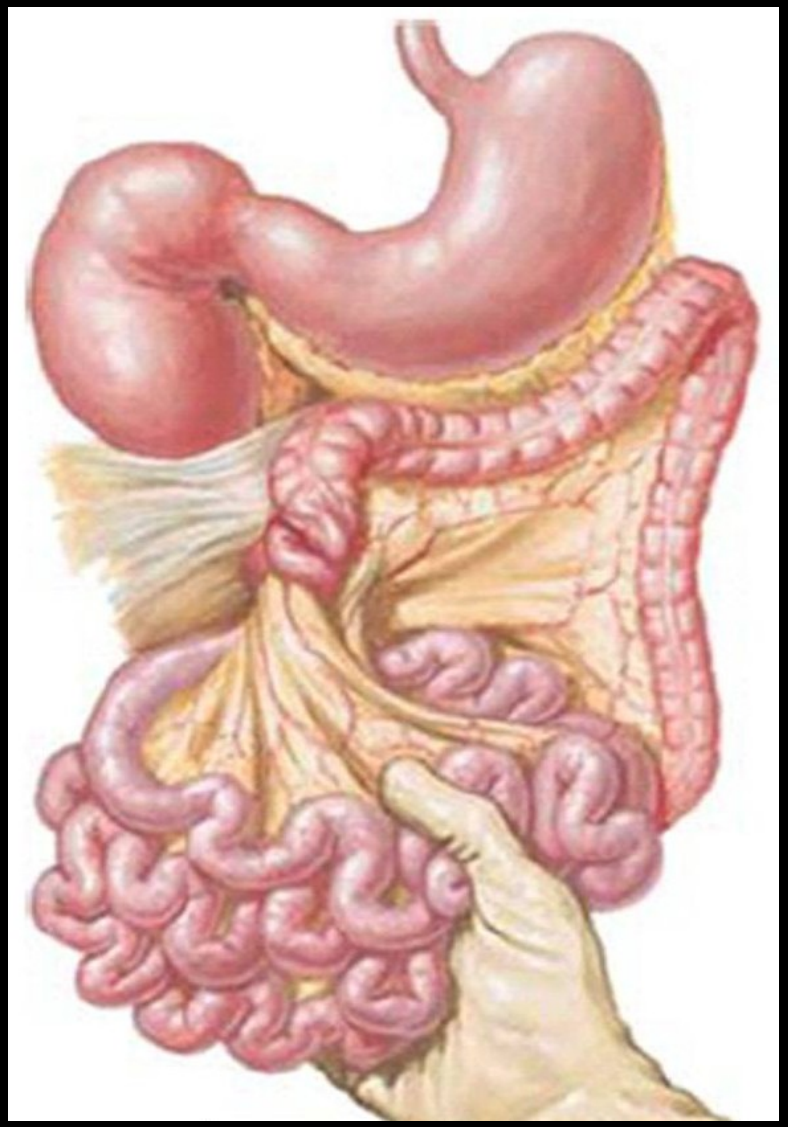
LADD SYNDROME

Classification 2



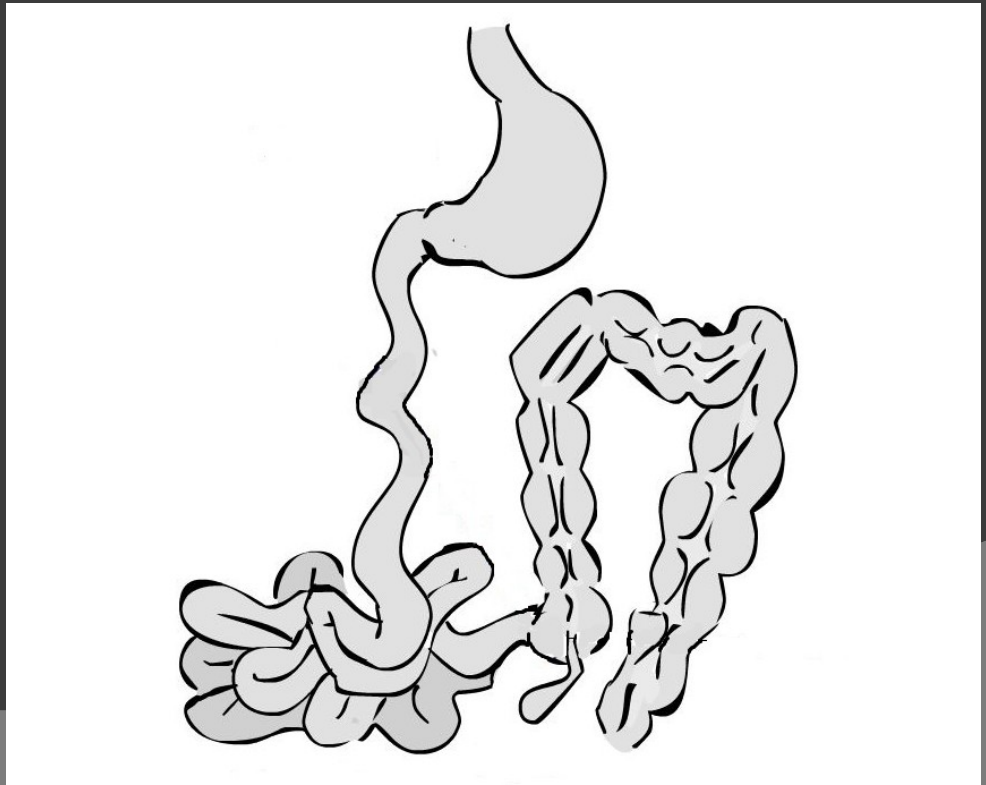
Malrotation

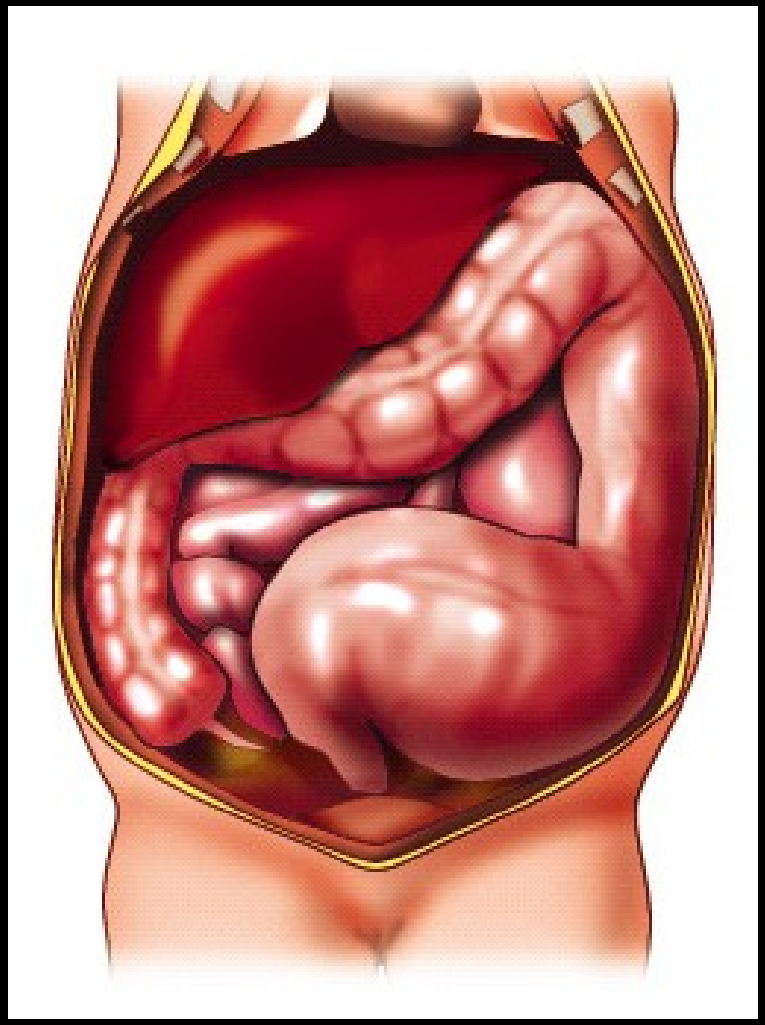




Treatment?

- Interruption of Ladd strands derotation and deposit to the *nonrotation* position





- determination of affected part

HIRSCHSPRUNG DISEASE

- Former name megacolon congenitum

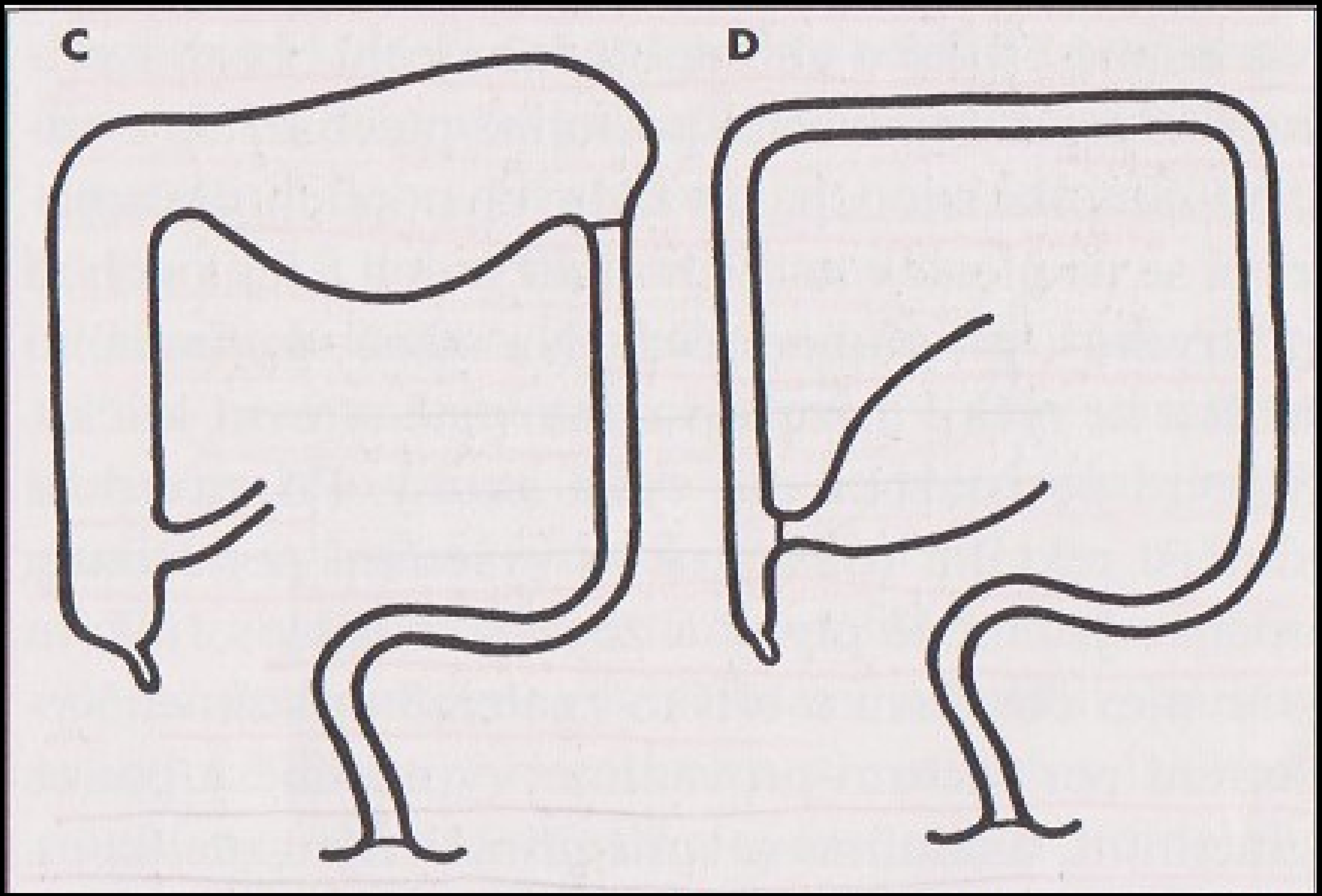
Why ?

1691 F.Raysch – 1st description

1887 Harald Hirschsprung – pediatrist form Copenhagen (1830-1916) proved in his lecture in Berlin that it is congenital disease *(megacolon congenitum)*

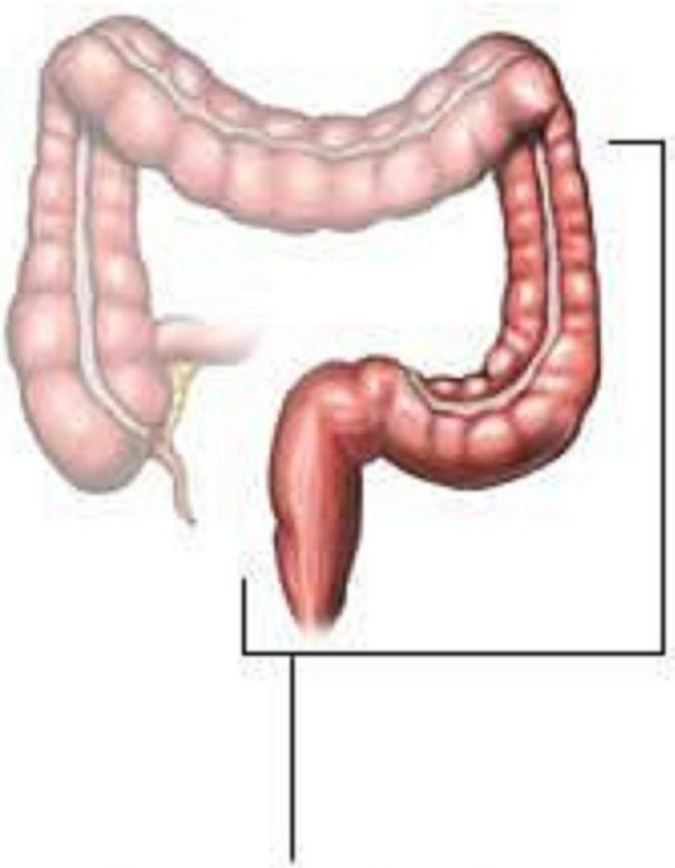
1901 Tittel – description of ganglial cells absence in intestine

1948 Swenson, Bill – elucidation of pathogenesis and causal treatment



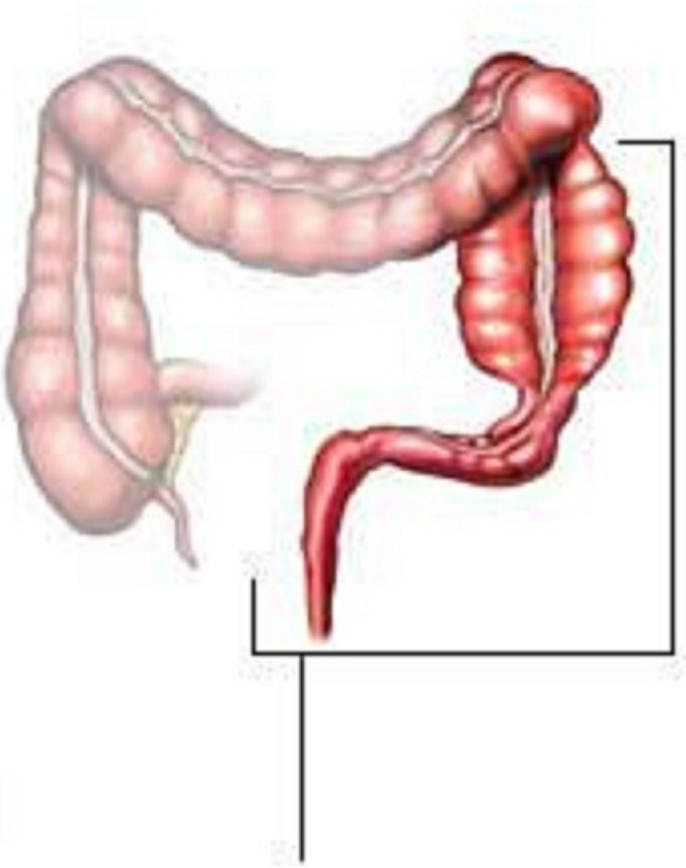
Ultrashort Long

Total aganglionosis Rectosigmoid



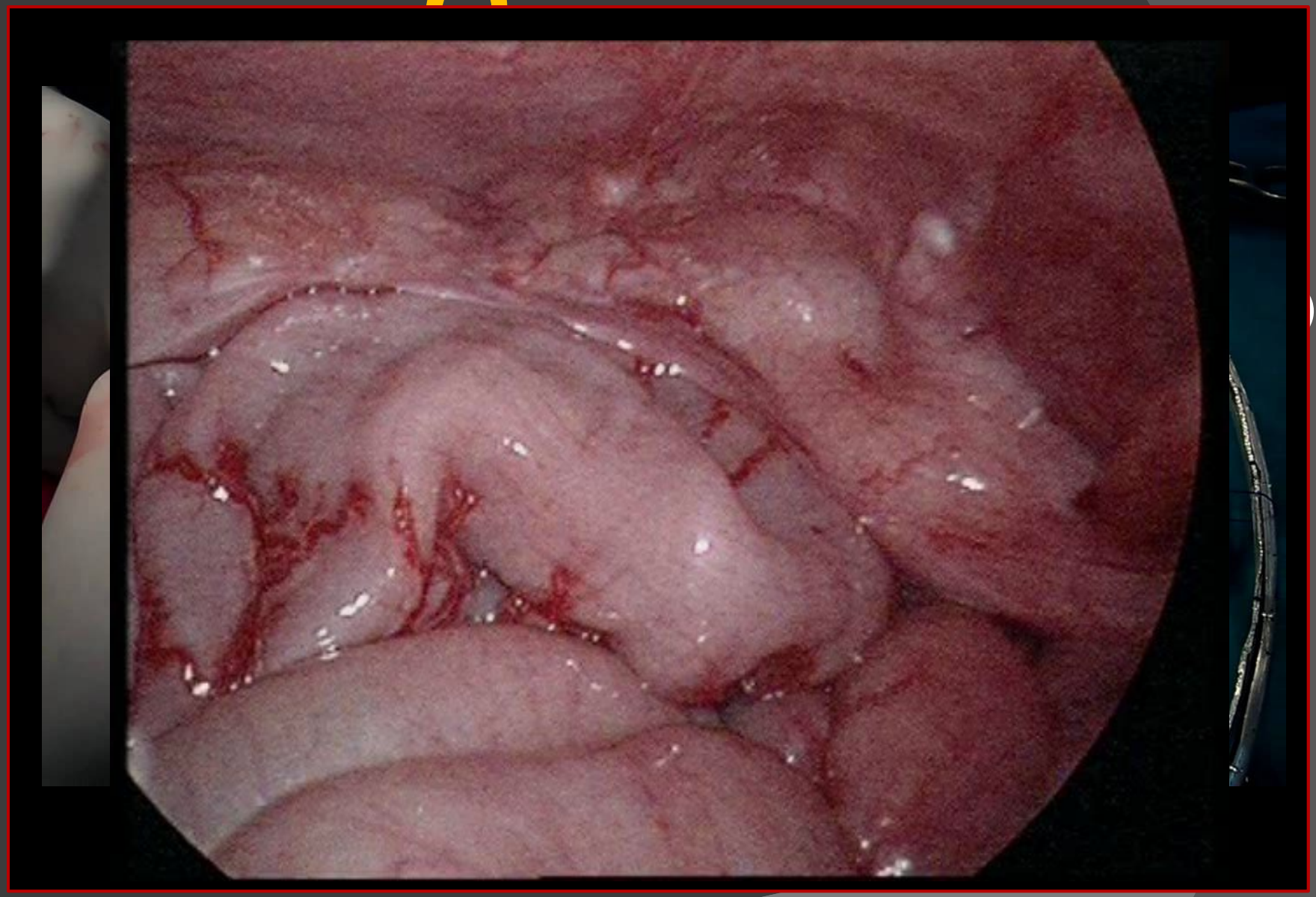
TRAČNÍK, ESOVITÁ KLIČKA A REKTUM U ZDRAVÉHO DÍTĚTE

COLON, S-SHAPED LOOP AND RECTUM AT HEALTHY CHILD



STEJNÁ OBLAST PŘI MORBUS HIRSCHSPRUNG

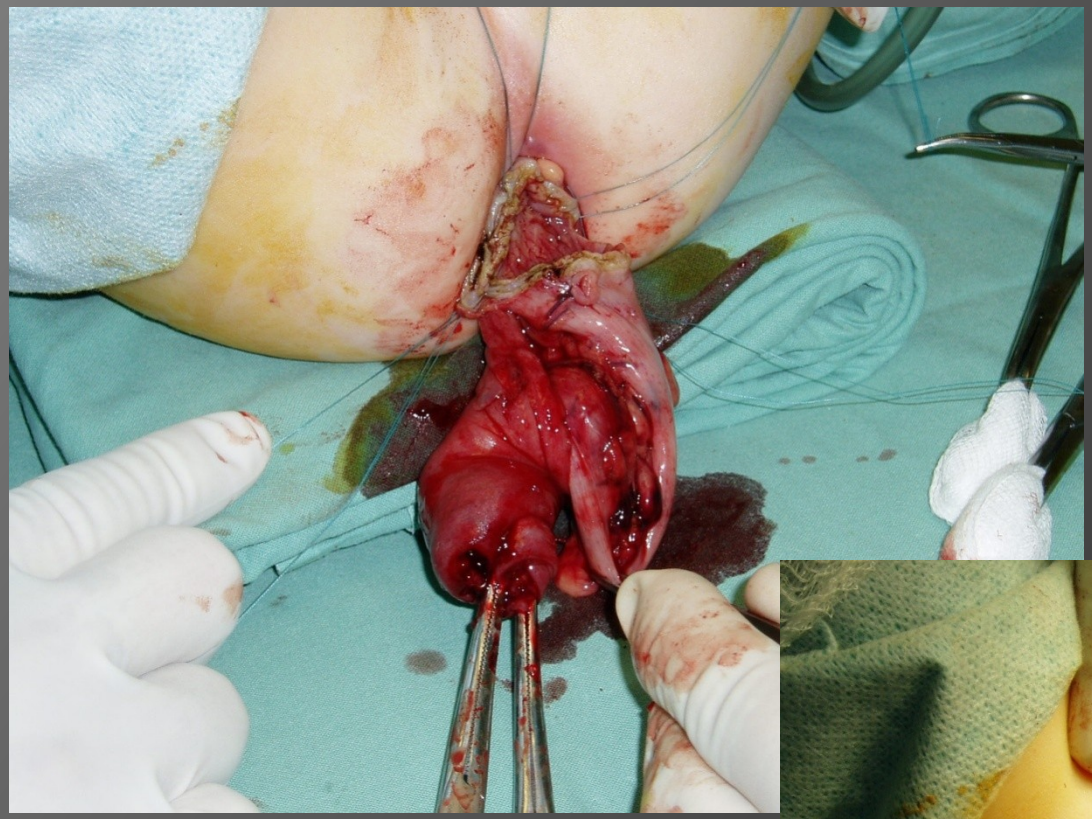
THE SAME AREA AT MORBUS HIRSCHSPRUNG



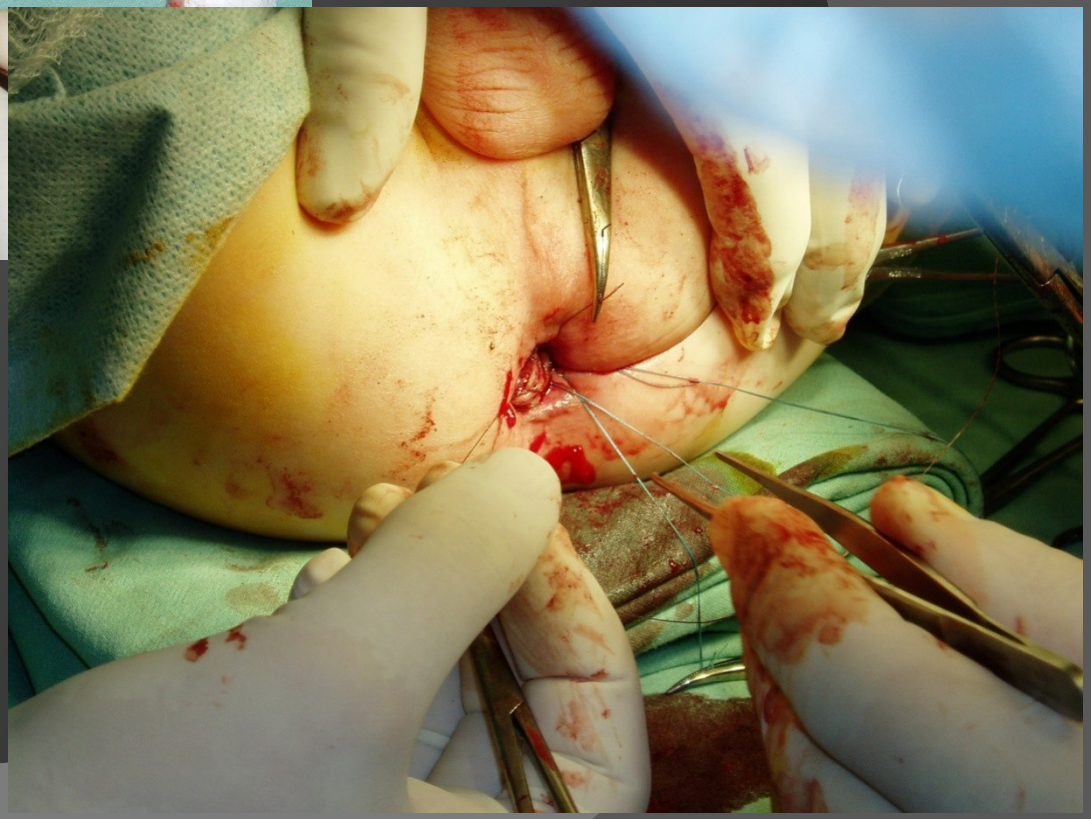
prolapsus recti

(after laparoscopic release of rektosigmoidei)

transanal pull-through of part aganglionar



resection of part aganglionar



Progressive sewing of colorectal anastomosis

The final effect after anastomosis reposition

Diagnosis 9

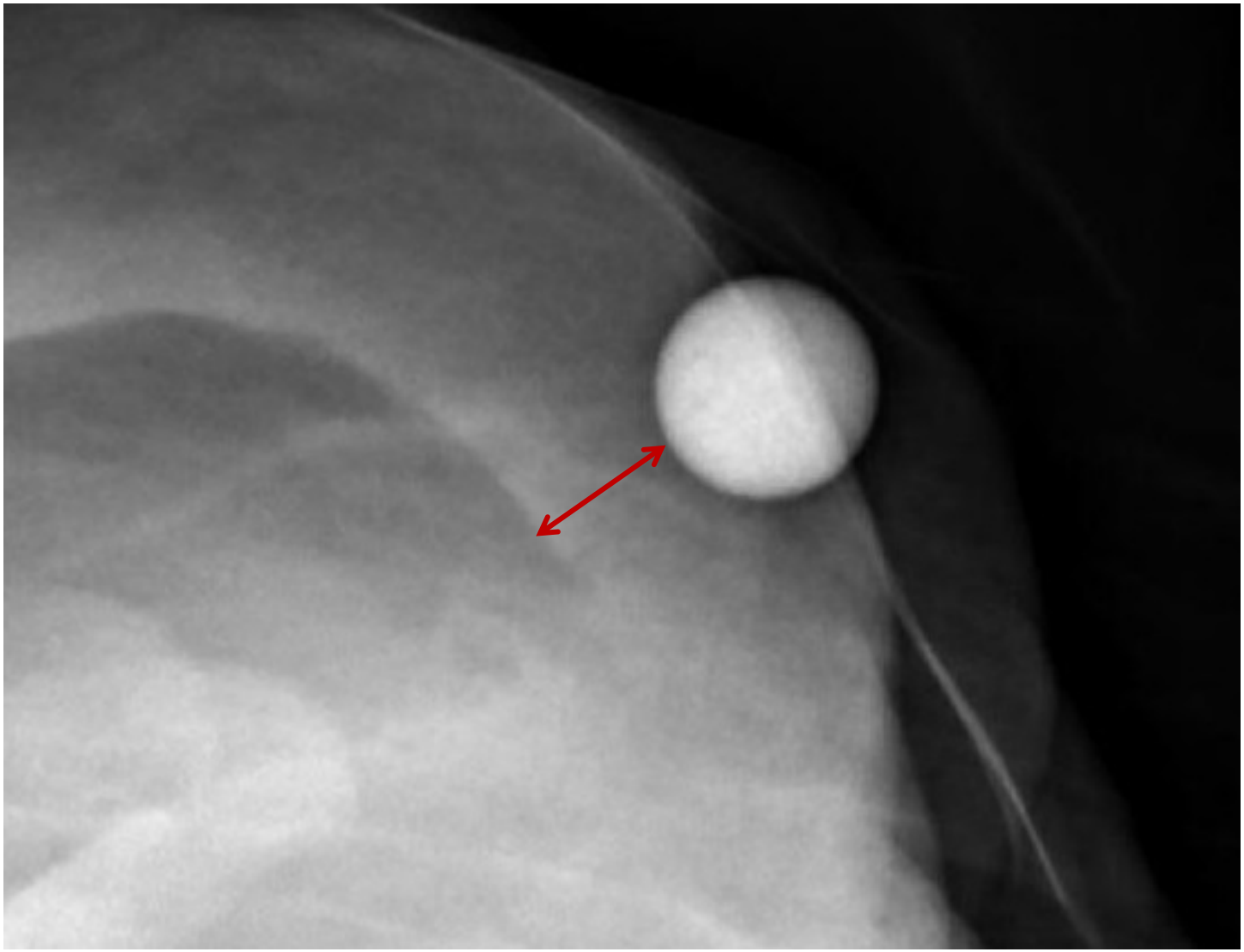
- eutrophic newborn, PNV 51cm/3450g
- postnatally: absence of meconium leaving
  no created rectum

ANORECTAL MALFORMATION (ATRESIA ANI)

Diagnosis 9

- eutrophic newborn, PNV 51cm/3450g
- postnatally: absence of meconium leaving
  no created rectum

NEXT PROCEDURE ?

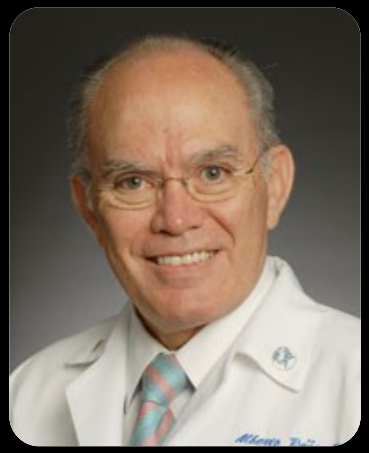


de

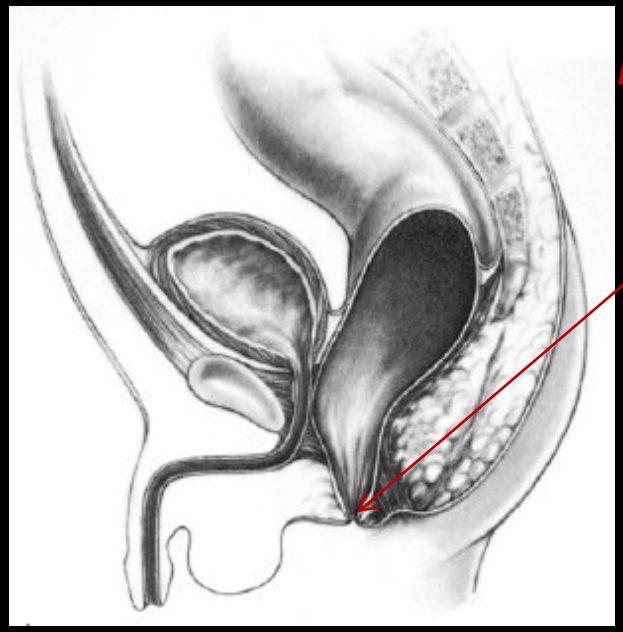
of

sphincter and anorectal malformations

Pena Classification

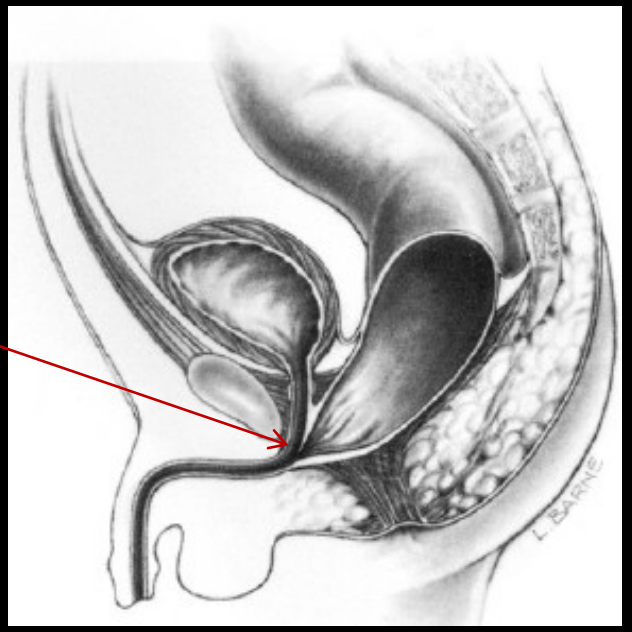


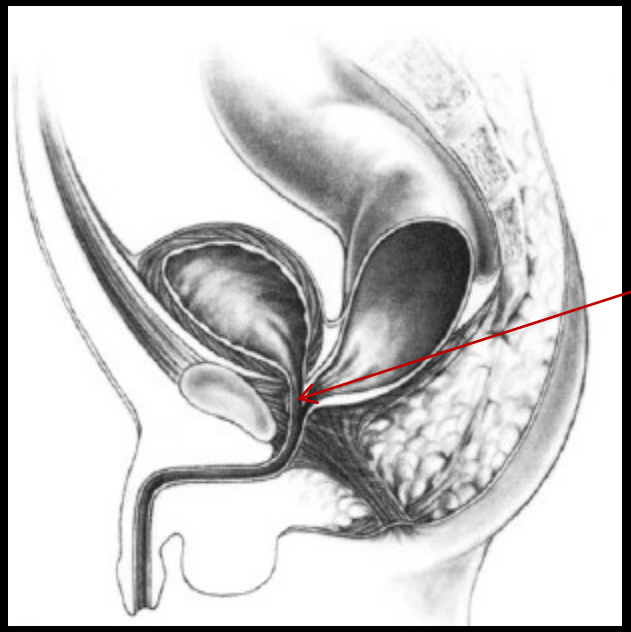
Alberto Peña, MD
Founding Director, Peña Colorectal Center
Professor, UC Department of Surgery, Cincinnati, USA



Perineal fistula

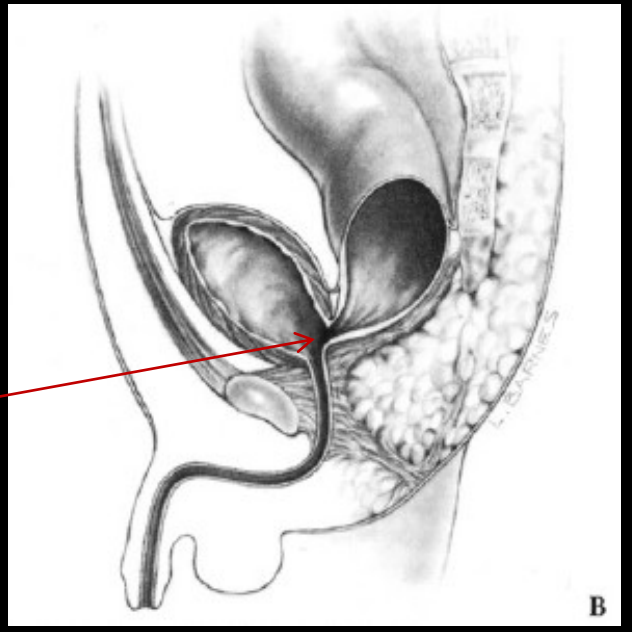
Urethral fistula

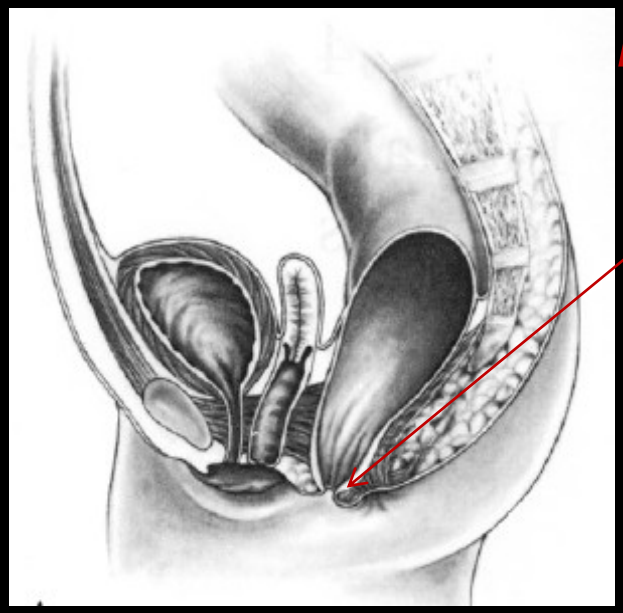




Prostatic fistula

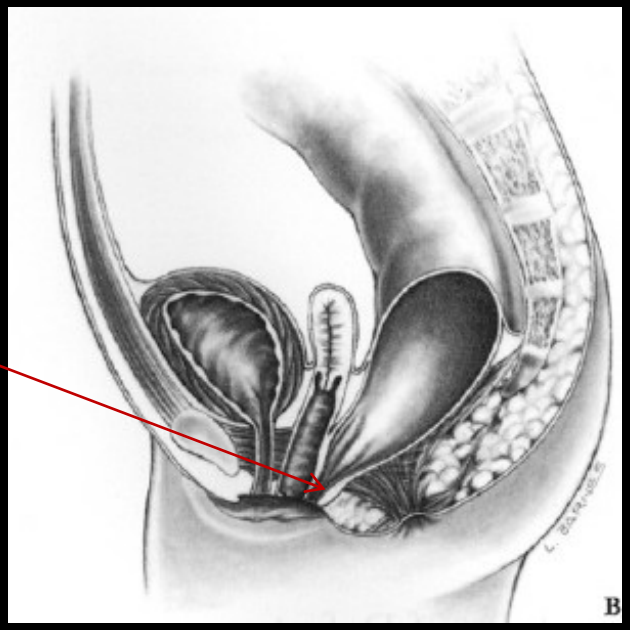
Vesical fistula

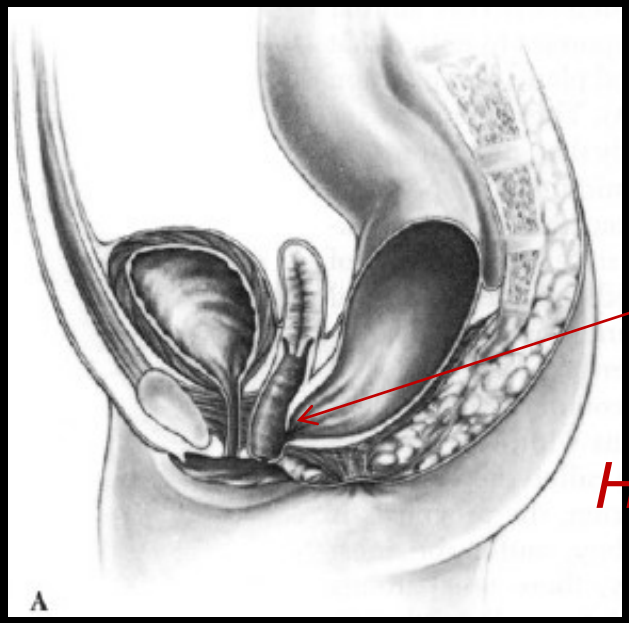




Perineal fistula

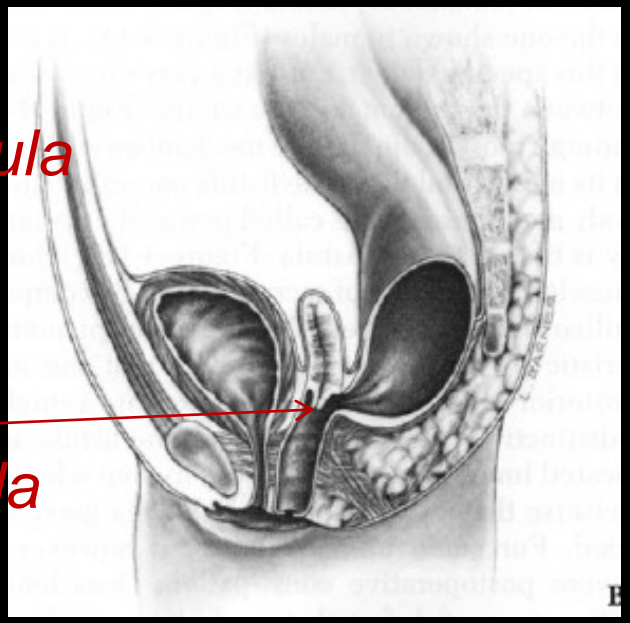
Vestibular fistula

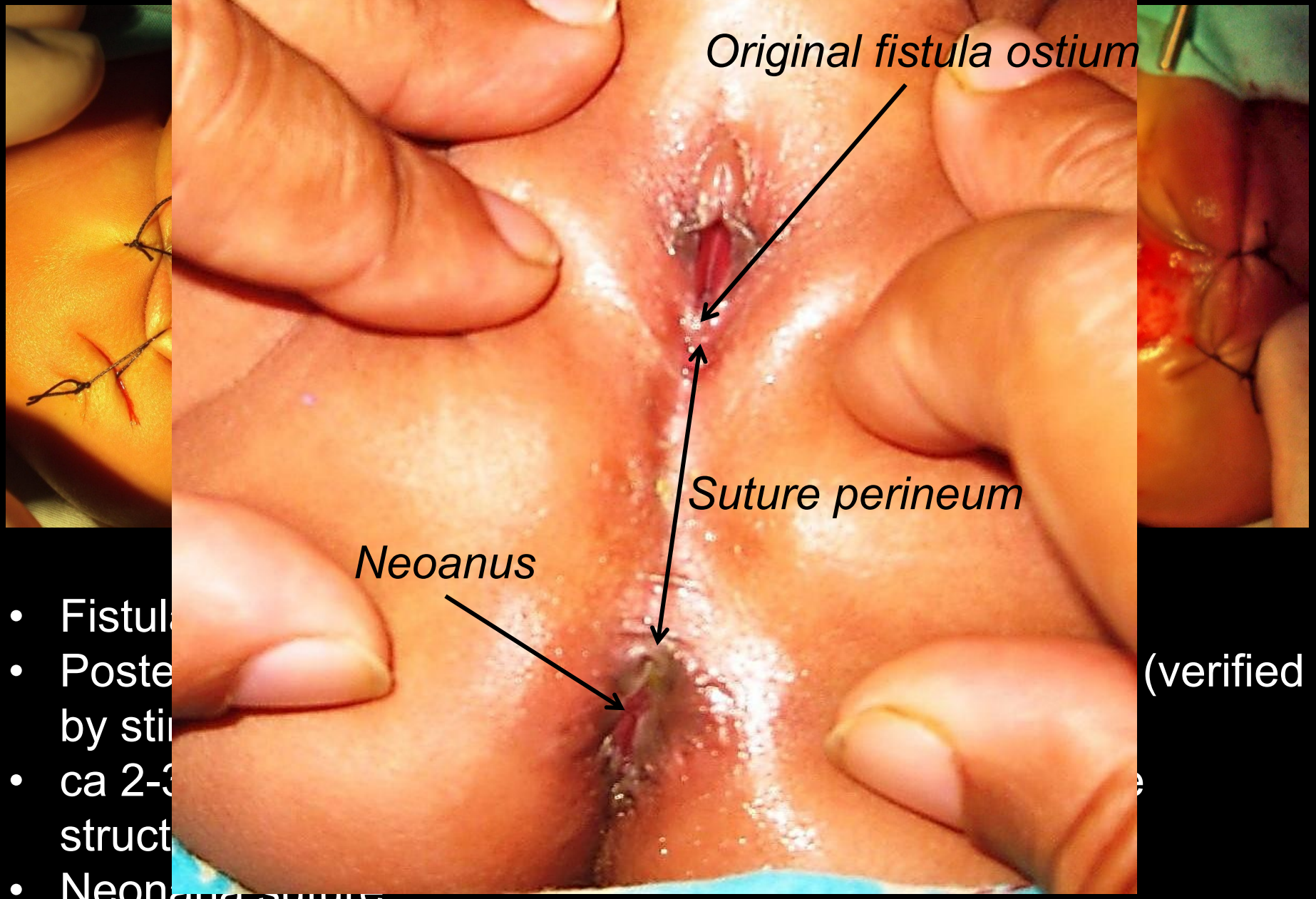




Low rectovaginal fistula

High rectovaginal fistula





- Fistul
- Poste (verified by sti
- ca 2-3 struct
- Neonatal suture

THANK YOU FOR YOUR ATTENTION