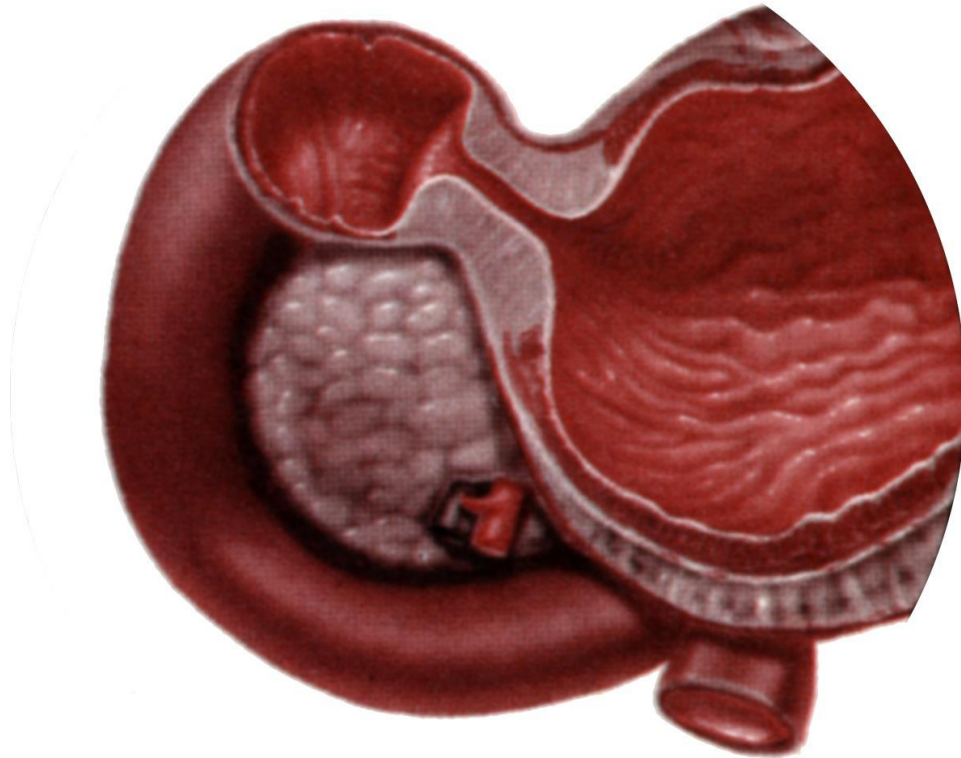


Pediatric Surgery



Infantile Hypertrophic Pyloric Stenosis (IHPS)



Objectives

At the end of this subject you should be able to:

1. Define IHPS.
2. List the cardinal features and signs of IHPS.
3. Determine the investigations and treatment of IHP.

- ☆ Acquired condition
- ☆ Hypertrophy of circular muscles of the pylorus
- ☆ Incidence 1-4 in every 1000 live birth
- ☆ Boys are affected four times more than girls
- ☆ Aetiology is multifactorial
- ☆ Age of presentation is 2-8 weeks of life
- ☆ Rare after 3 month of age

IHPS

C/F:

1. Vomiting

- *Non bilious.*

- *Projectile.*

- *Postprandial.*

2. Dehydration

3. Weight Loss

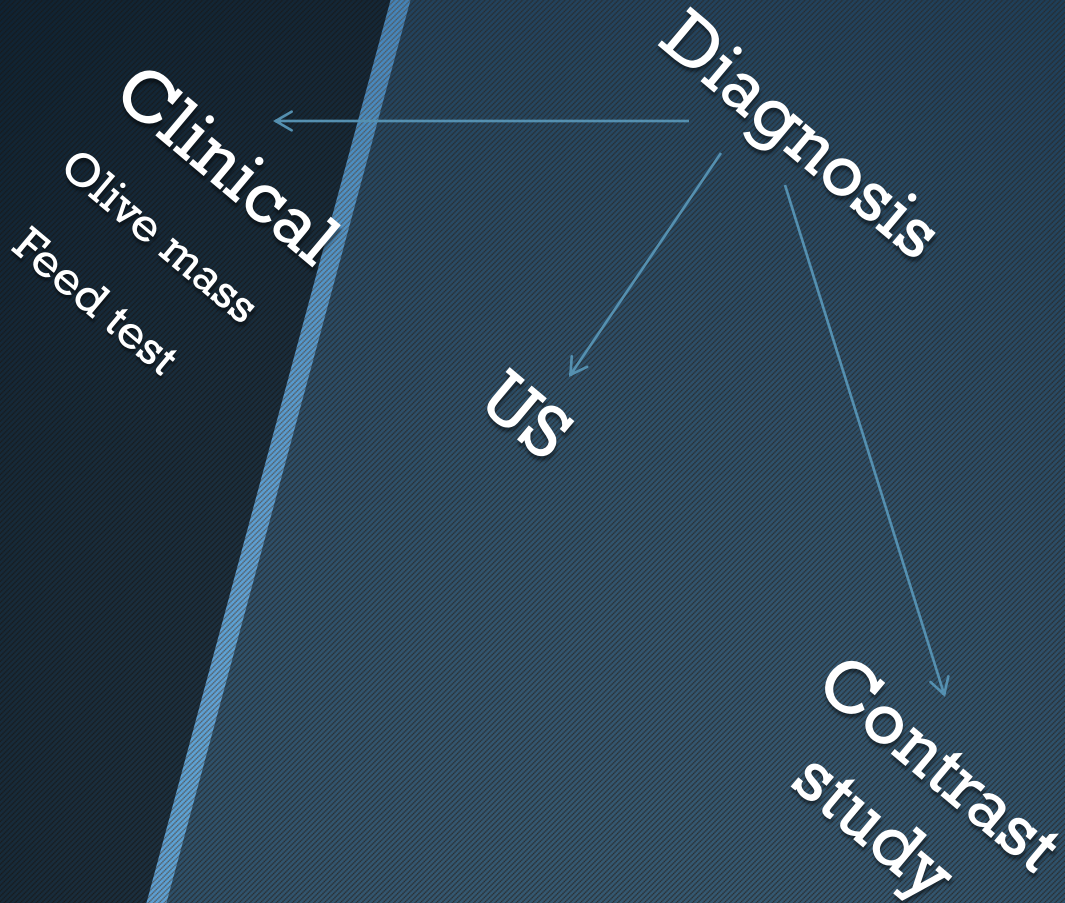
O/E:

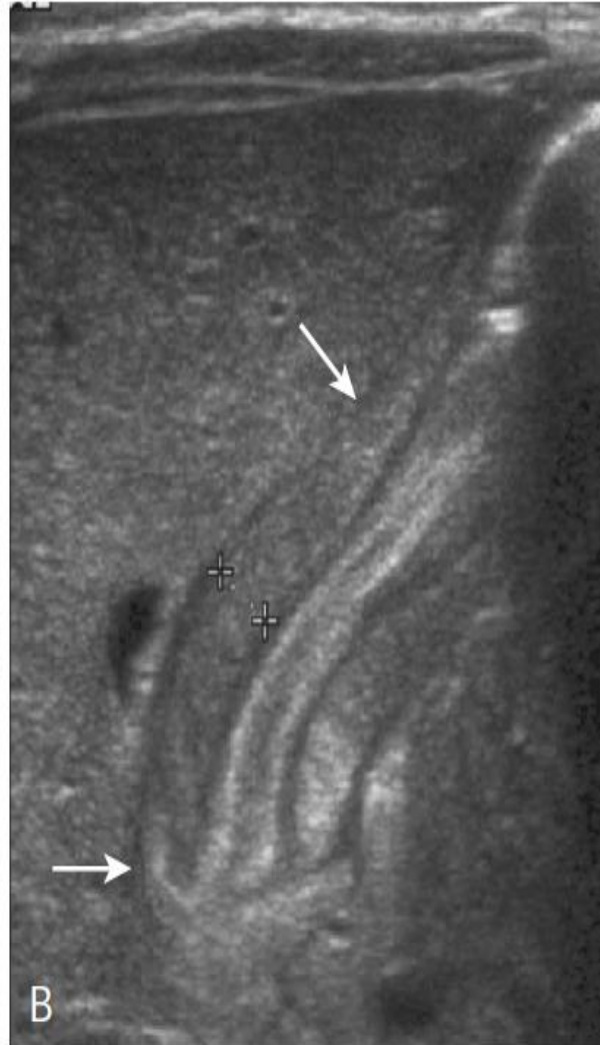
→ visible peristalsis

→ olive mass

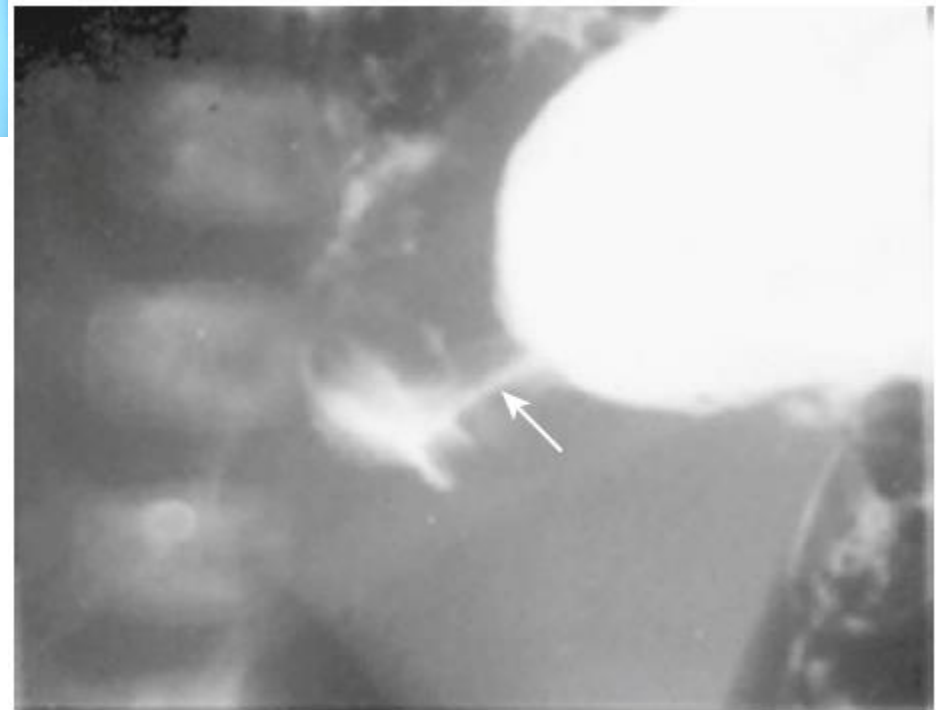
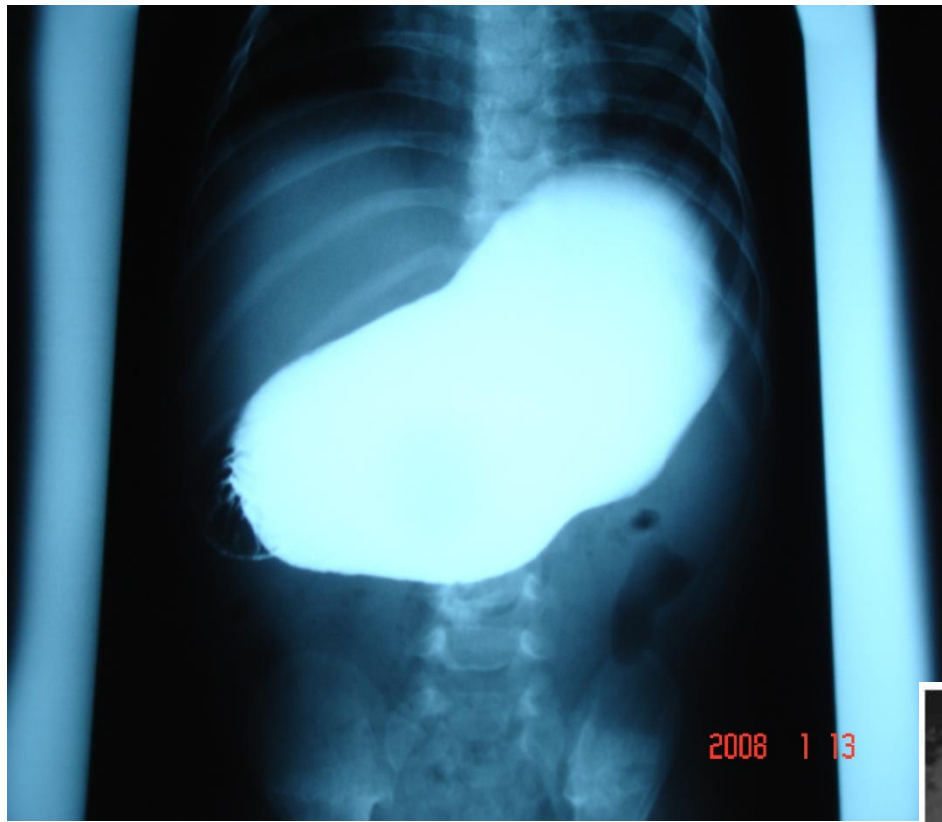








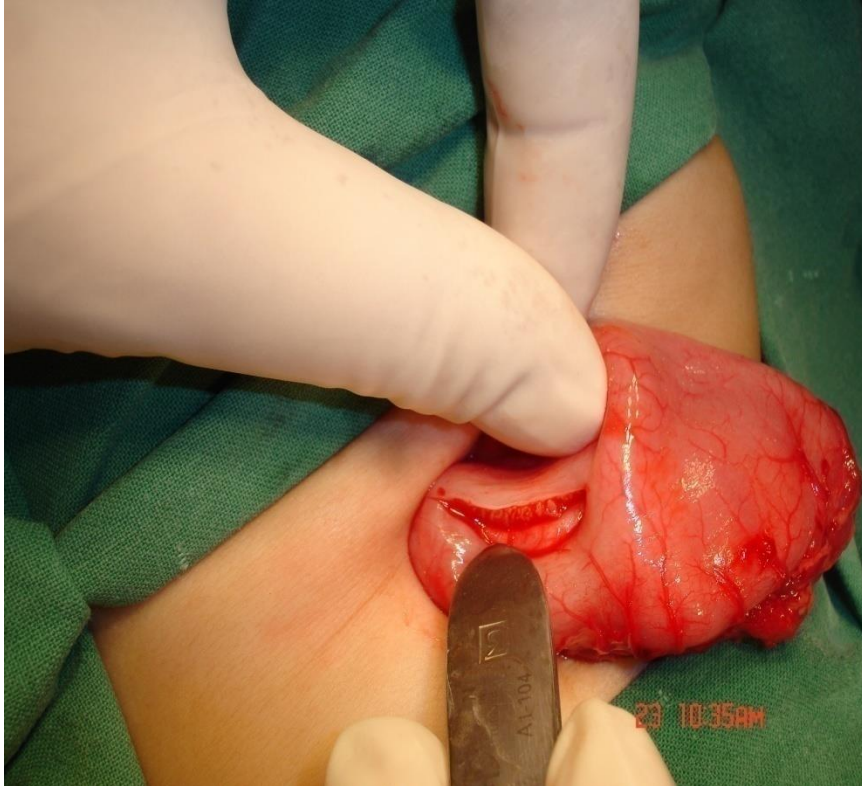
Ultrasonography has become the standard imaging study for diagnosing pyloric stenosis and has supplanted physical examination at most institutions. The transverse (A) and longitudinal (B) views of hypertrophic pyloric stenosis are seen here. Muscle thickness greater than or equal to 4 mm on the transverse view or a length greater than or equal to 16 mm on the longitudinal view is diagnostic of pyloric stenosis. On this study, the pyloric wall thickness was 5 mm and the length (arrows) was 20 mm.



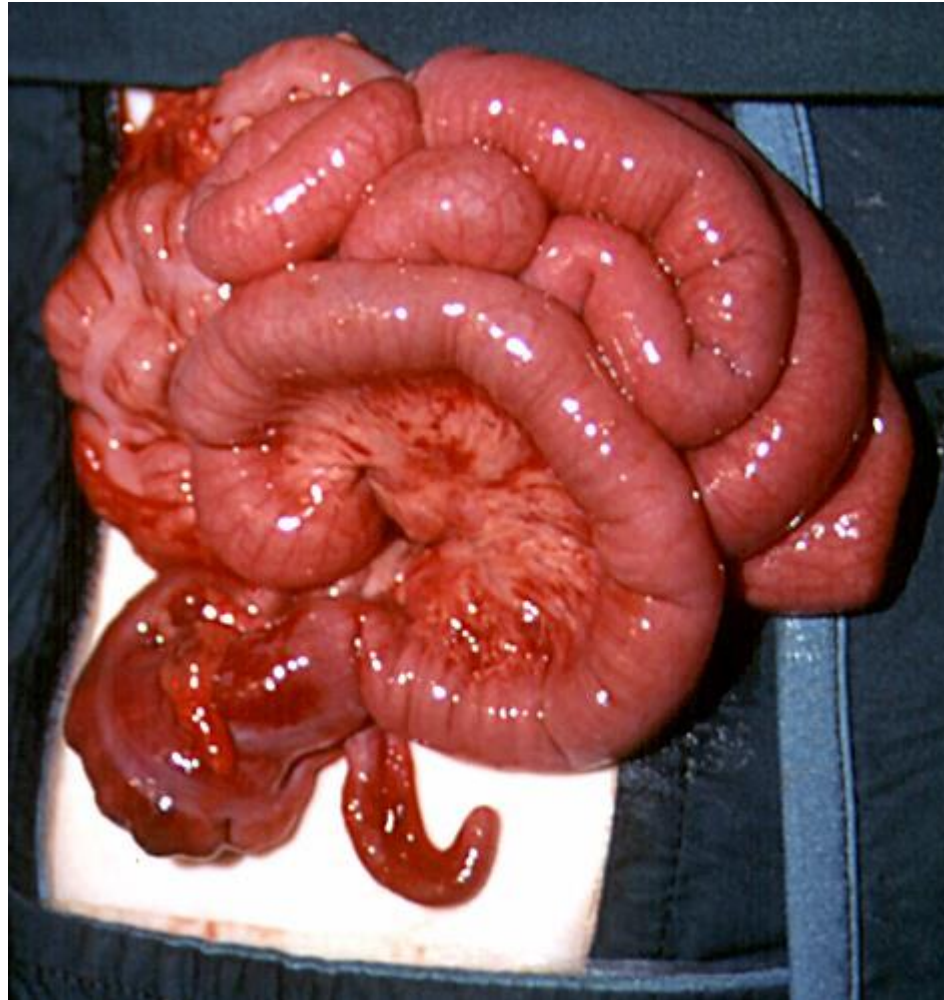
Treatment

- ★ Stop oral feeding with /without NGT
- ★ Correction of hydration state with fluid and electrolytes replacement
- ★ Monitoring of glucose
- ★ 120-150 ml/kg of 0.45% saline + 5% dextrose + 20 meq of K⁺ per one liter of fluid.
- ★ Surgery is not an emergency

Pyloromyotomy



Intussusception



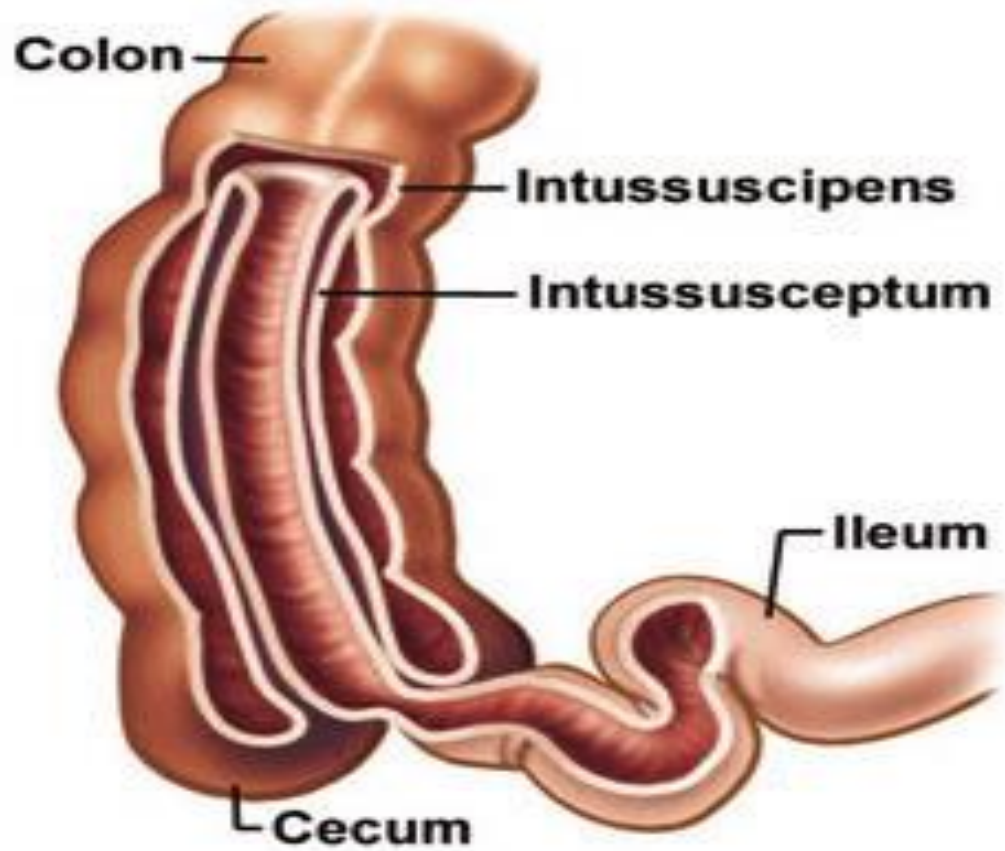
Objectives

At the end of this subject you should be able to:

1. Define Intussusception.
2. Classify the Intussusception.
3. List the symptoms and signs of Intussusception.
4. Name the investigations used to confirm the diagnosis.
5. Itemize the modalities of treatment.

Definition:

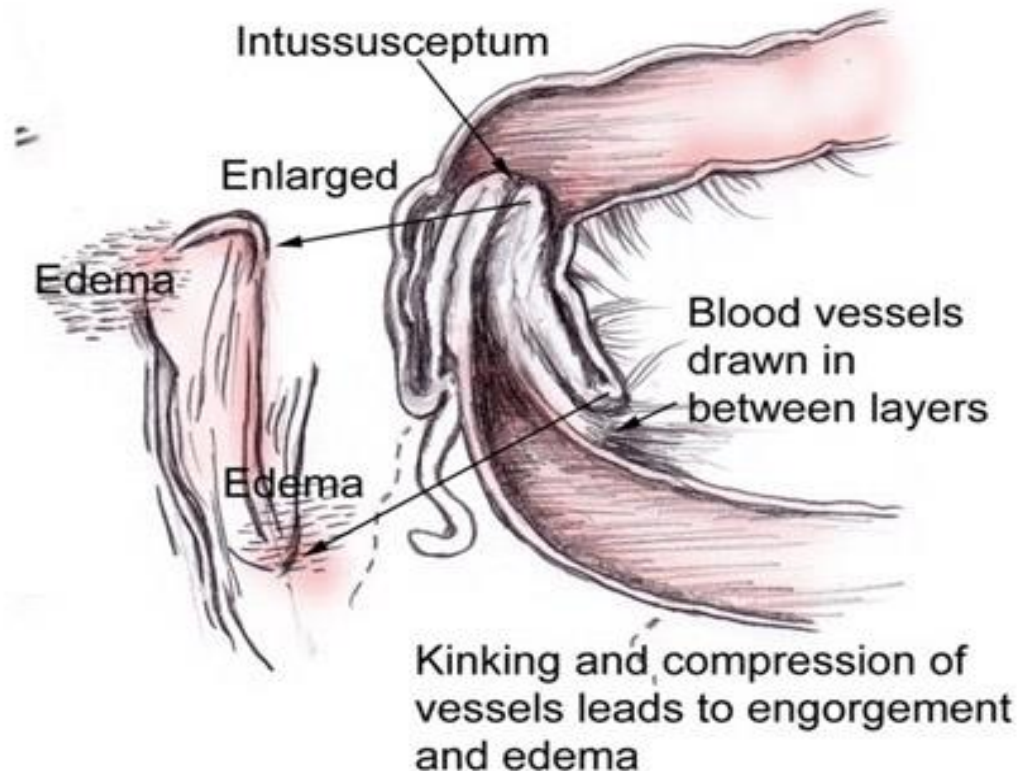
Types → Anatomically
→ Etiology



10% of cases there is a pathological leading point and it occurs more in children more than 2 years of age and in cases with recurrent intussusception.

More during attacks of upper respiratory tract infection and gastroenteritis.

Age 5-10 month
More in boys



C/F:

1. Abdominal cramps

2. Vomiting

3. Bowel motion

O/E: dehydration

abdominal distension

palpable abdominal mass



P/R:

Dx.

1. Plain radiograph



2007 1

Abdominal radiograph showing dilated loops of small bowel in the right lower quadrant and a soft tissue mass density in the vicinity of the transverse colon near the hepatic flexure (arrow).

2. US



Sonogram showing the "pseudokidney" sign seen with intussusception on longitudinal section.

3. Contrast enema





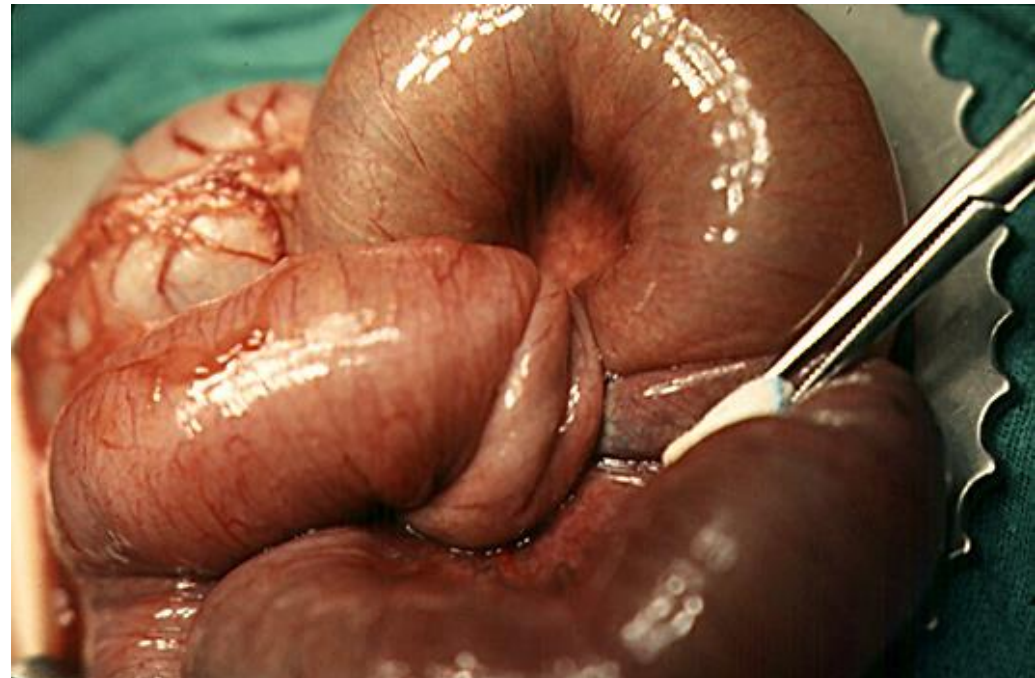
Contrast enema view after hydrostatic reduction of an intussusception to the ileocecal junction. A persistent filling defect (arrow) is present without free reflux into the terminal ileum.

Surgical
Indication

Manual reduction

Resection with end-end anastomosis

Appendicectomy (incidental)



Acute abdominal pain In Children



Non specific abdominal pain



Acute appendicitis



Constipation

UTI

Serious pathology

History and examination

Time and patience.

The child is frightened and the parents are worried.

Difficult to accurately describe or localise abdominal pain.

Inspect the abdomen thoroughly and reassess after a period of time.

The genitalia, chest and neck must also be examined.

Rectal examination is not routinely done.

Active observation ?

Admit the child

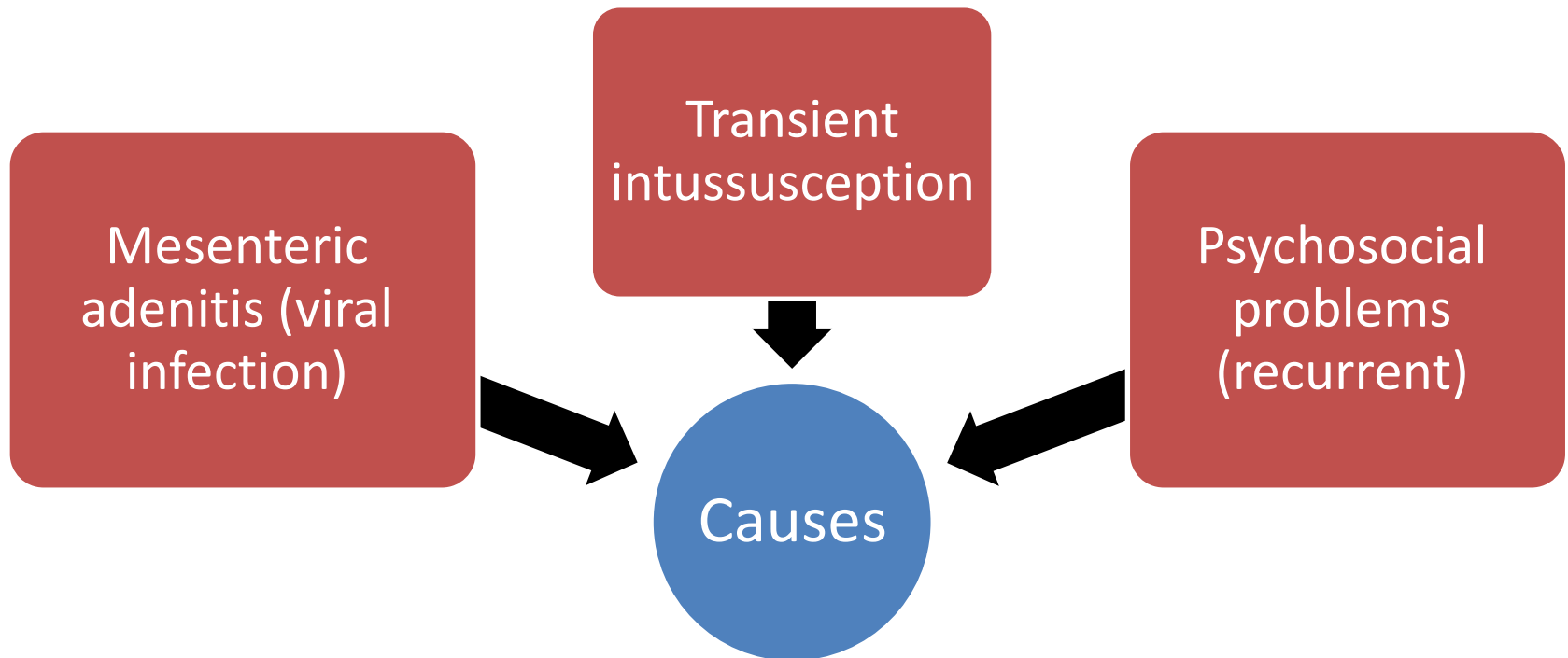
Reassess after few hours

Clear fluid and simple analgesia

Reduce the need for investigations and removal of innocent appendix.

Acute non-specific abdominal pain

- Similar to acute appendicitis differences??
- Poorly localized
- not aggravated by movement
- gardening (rarely)
- self limiting symptoms (48 hr)



Acute appendicitis

Classical features :

Abdominal pain, nausea, anorexia, vomiting,
localised tenderness, loose stool (pelvic).

Dysuria ?? False?!

Sterile pyuria ?

Temp. & pulse rate:

normal or slightly elevated

initially

39⁰C and above

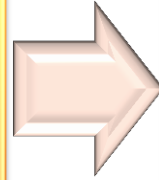
perforated appendix, abscess

formation

Not acute appendicitis

Examination of chest (Rt. lower lobe pneumonia),
tonsils,.....etc

Preschool child presents late



Peritonitis
Appendicular mass

Poorly communicated symptoms

Easily confused with UTI, GE

Abdominal signs are modified with AB (throat or ear infection)

Why they develop peritonitis more common?????

1. Late presentation and difficult diagnosis.
2. More incidence of faecoliths (obstructing type)
3. Poorly developed greater omentum.

Rx:

1. Resuscitation with i.v fluid, AB, analgesia.
2. Surgery which is either open or laparoscopically.

Rx of App. Mass & abscess

Summary box

Work-up of children with acute abdominal pain

- A careful history and examination and active observation are paramount
- Routine tests include urine analysis, microscopy and culture
- Frequently helpful tests: abdominal ultrasound scan (can diagnose pelvic and urinary tract pathology, intussusception and other conditions)
- Occasionally helpful tests: a plain supine abdominal radiograph (particularly in the preschool child with pain and vomiting), urea and electrolytes and full blood count
- Selective specific investigations: blood culture, stool culture, plasma amylase, diagnostic laparoscopy