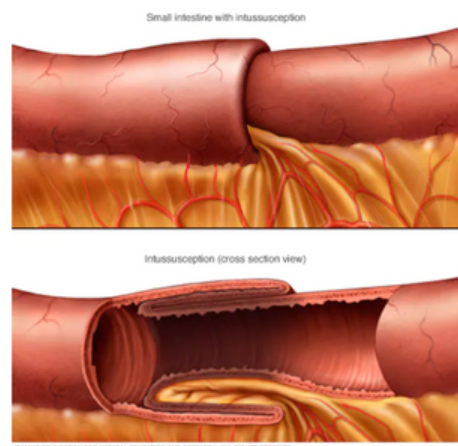


Intussusception

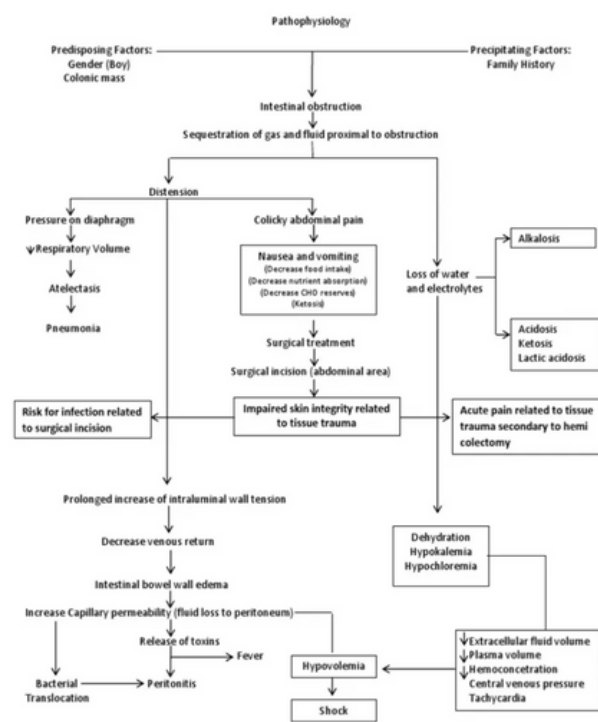
UNDERSTANDING THE FACTS BEHIND

1. Definition

- A process in which a segment of intestine (the intussusceptum) invaginates/ telescopes into the adjoining intestinal lumen (the intussusciens), causing bowel obstruction
- With early diagnosis, appropriate fluid resuscitation, and therapy, the mortality rate from intussusception in children is less than 1%. If left untreated, however, this condition is uniformly fatal in 2-5 days



2. Pathophysiology



Reference: Lippincott (2002). Pathophysiology: Concepts of Altered Health States, 6th edition. Page 51

3. Clinical presentations

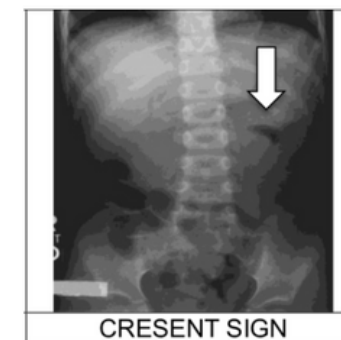
- Sudden onset, paroxysms of colicky abdominal pain + crying
- Early vomiting → rapidly becomes bile stained
- Hallmark findings:
 - Palpable 'sausage-shaped' mass, often in right upper quadrant
 - Emptiness in right lower quadrant (Dance's sign)
- Neurological symptoms: lethargy, hypotonia, sudden alterations of consciousness
- Dehydration, pallor, shock
- Early stage: normal stools; late stage: mucoid and bloody 'redcurrant stools'

4. Investigations

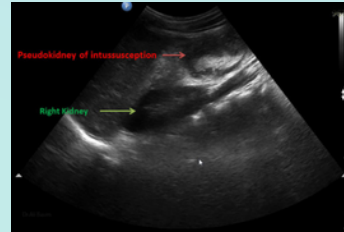
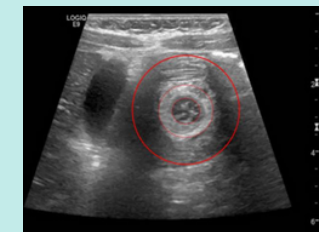
- FBC - may show neutrophilia
- U&E - may reflect dehydration
- Abdominal x-ray - dilated gas-filled proximal bowel, paucity of gas distally, multiple fluid levels (may be normal in early stages)



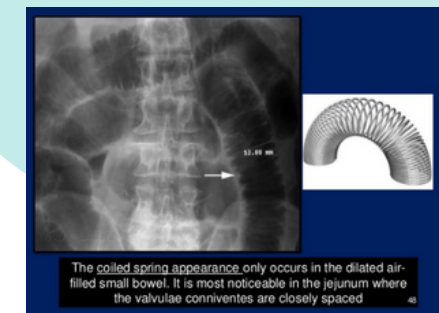
- Barium enema (gold standard)
 - Crescent sign



- Ultrasound
 - doughnut/ target sign
 - Pseudokidney appearance



- Coiled spring sign



5. Management

- Nasogastric drainage
- IV fluid resuscitation
- Broad-spectrum antibiotics
- Non-operative reduction
 - Contraindicated in peritonitis & perforation
 - Hydrostatic (barium/ water-soluble) reduction
 - Pneumatic (air) reduction [preferred]
- Surgical reduction
 - Indications: peritonitis, perforation, prolonged history (> 24 hrs), failed enema
 - Manual reduction
 - Resection of involved segment & primary anastomosis