

ISCHEMIC BOWEL DISEASE

Ischemic damage to the bowel wall can range from :

- ? *Mucosal infarction*, extending no deeper than the muscularis mucosa.
- ? *Mural infarction* of mucosa and submucosa.
- ? *Transmural infarction* involving all three layers of the wall.
emergency + lead to Serositis
- ? While mucosal or mural infarctions often are secondary to acute or chronic *hypoperfusion*, transmural infarction is generally caused by acute **vascular obstruction**.



OTHER CAUSES

- *CMV infection.*
- *Radiation enterocolitis .*
- *Necrotizing enterocolitis .Common in babies who born in small size*
- *Angiodysplasia* is characterized by malformed submucosal and mucosal blood vessels. *(normally they don't be here)*



- Clinical picture of intestinal obstruction.

- Abdominal pain

- Distention

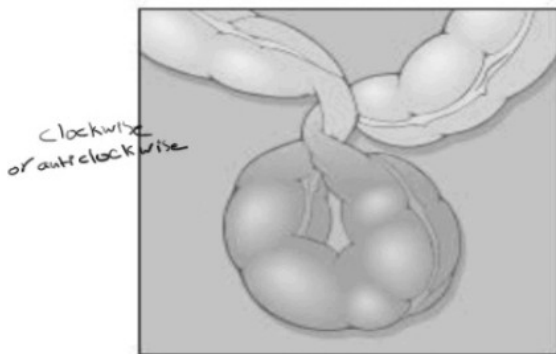
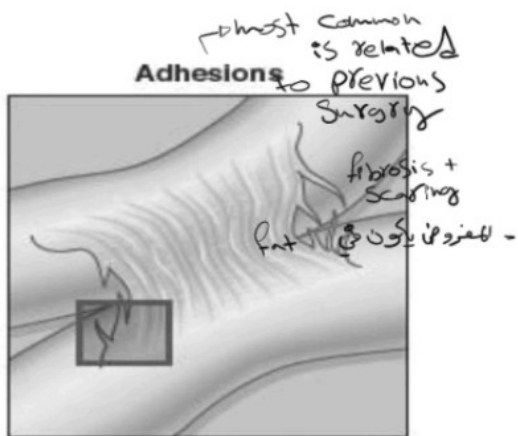
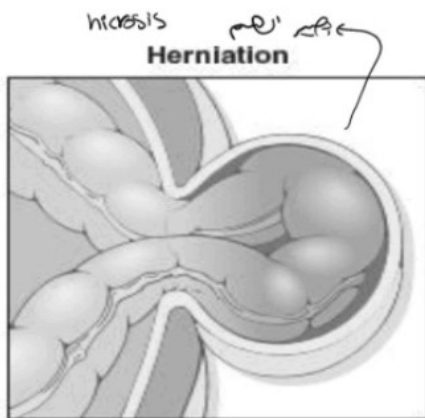
- Vomiting

- Constipation.

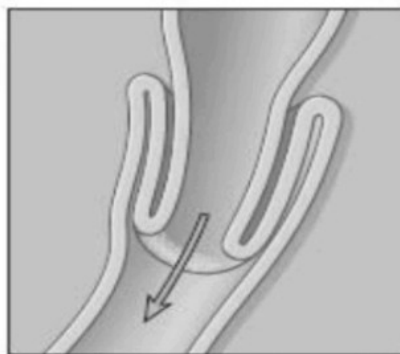
The baby should pass
his first stool within
the first 48 hours

- Acute or chronic.

80% of mechanical obstructions



Volvulus



Intussusception

most common in pediatric group

Intussusception

- ☐ Segment of the intestine constricted by a wave of peristalsis, telescopes into the immediately distal segment.
- ☐ Once trapped, invaginated segment is propelled by peristalsis, and pulls mesentery with it.
- ☐ Most common cause of intestinal obstruction in children younger than 2 years of age.
- ☐ Untreated progresses to infarction.

- العلاج النقيح يدخلوا
سادة صولة من Bectum
ويجروا Push لل Intesten
حتى يذهب مكانه

INTUSSUSCEPTION

(usually happens in ILEOCECAL region)

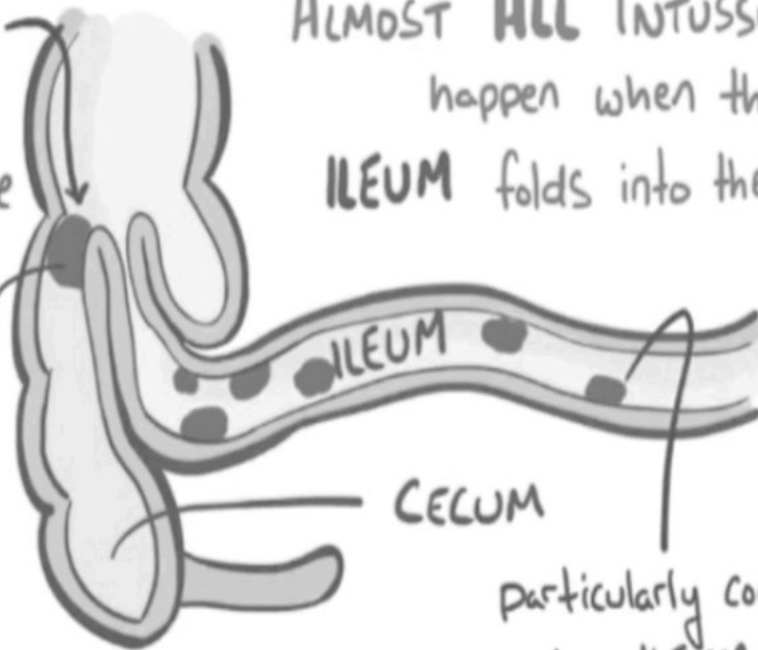
- جتظفوا ال baby
عن طريق ضغط الركبة إلى البطن

* in BABIES the
LEADING EDGE is often
LYMPHOID HYPERPLASIA
enlargement of lymph tissue

ALMOST ALL INTUSSUSCEPTIONS
happen when the
ILEUM folds into the CECUM



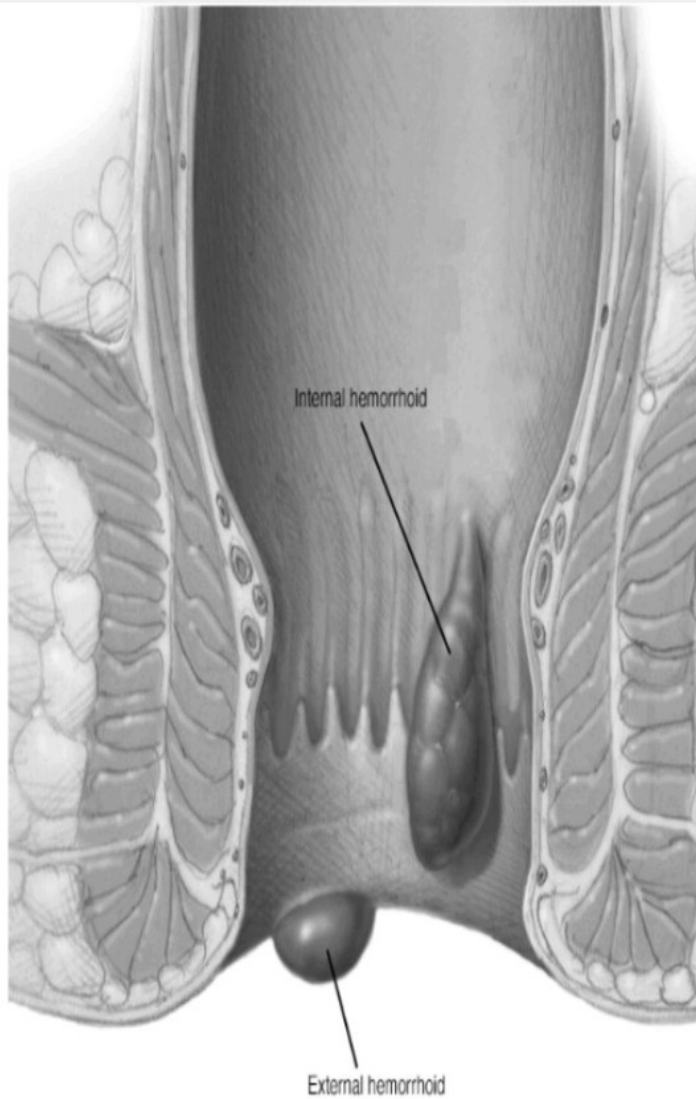
PEYER'S PATCHES
enlarge to fight off INFECTION



Particularly common
in ILEUM

Pathogenesis

- ☐ During embryogenesis
- ☐ Disrupted migration of neural crest cells from cecum to rectum.
- ☐ Lack of Meissner submucosal plexus and the Auerbach myenteric plexus. (muscularis)
- ☐ Failure of coordinated peristaltic contractions.
- ☐ Mutations in RET: in familial cases and 15% of sporadic
- ☐ Other genes and environmental factors play role.



INTERNAL HEMORRHOID GRADES

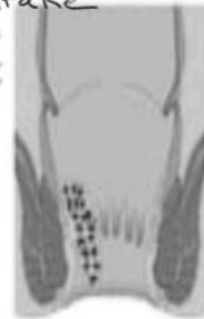
Grade I

increase the fiber intake

Grade II



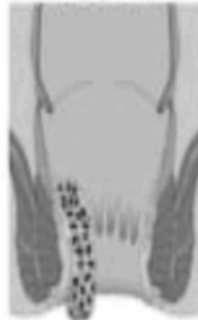
No prolapse,
just prominent
blood vessels



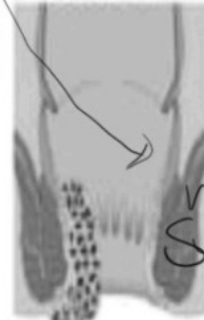
Prolapse upon
bearing down,
but
spontaneous
reduction

Grade III

Grade IV



Prolapse upon
bearing down
requiring
manual
reduction



Prolapse with
inability to be
manually
reduced

need surgery

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Malabsorptive Diarrhea

☐ Chronic.

☐ Defective absorption of fats, fat- and water-soluble vitamins, proteins, carbohydrates, electrolytes, minerals and water

☐ Hallmark is : steatorrhea → defecation of large amount of stool, contain large amount of fat

The Acute diarrhea caused
be infectious

Malabsorptive diarrhea

Defect in one of the following:

☐ Intraluminal digestion. → depend on digestive enzymes

pancreatic insufficiency
البنكرياس

☐ Terminal digestion. crypt
↳ or villi
البنكرياس

☐ Transepithelial transport.

☐ Lymphatic transport.

TABLE 17-1 Defects in Malabsorptive and Diarrheal Disease

Disease	Intraluminal Digestion	Terminal Digestion	Transepithelial Transport
Celiac disease	رکوزن کاس الملوونن بسماسا کون کن ابمانی	+	+
Tropical sprue	لذا معلوین اولاً	+	+
Chronic pancreatitis	+		
Cystic fibrosis	+		
Primary bile acid malabsorption	+		+
Carcinoid syndrome			+
Autoimmune enteropathy		+	+
Disaccharidase deficiency		+	
Whipple disease			
Abetalipoproteinemia			+
Viral gastroenteritis		+	+
Bacterial gastroenteritis		+	+
Parasitic gastroenteritis		+	+
Inflammatory bowel disease	+	+	+

+ indicates that the process is abnormal in the disease indicated. Other processes are not affected.