

### Hernias

#### Definition

A protrusion of an organ or structure through the wall that normally contains it. Can entrap the intestines and cause intestinal blockage

#### Umbilical hernia

Usually congenital, appears at birth. Many resolve on their own, but might need surgery.

#### Diaphragmatic or hiatal hernia

Protrusion of stomach through the diaphragm via the esophageal hiatus. Can cause GERD. Acid suppression might help, but can do surgery.

#### Incisional hernia

Associated w/ vertical incisions, especially in obese pts. or if they have a wound infx.

#### Indirect inguinal hernia

More common, passage of intestine through the internal inguinal ring down the inguinal canal. May pass into the scrotum.

#### Direct inguinal hernia

Passage of intestine through the external inguinal ring at Hesselbach's triangle. Rarely enters scrotum.

#### Femoral inguinal hernia

Least common. Passes through the femoral ring.

#### Treatment (all hernias)

Surgical

### Lactose Intolerance (metabolic)

#### General

Lactose normally digested by lactase, which is produced in the SI. For a lot of the world's population, lactase production doesn't continue after age 12 --> lactose products not digested

#### Symptoms

Nausea, bloating, flatulence, diarrhea, cramping, vomiting

#### Management

Avoid dairy. Use lactase enzyme tablets.

### Esophageal Atresia (congenital)

#### Commonly associated with

tracheoesophageal fistulae

#### Clinical presentation in newborns

Excessive saliva and choking/coughing during feeding attempts

#### Diagnosis

Inability to pass an NG tube

#### Treatment

Surgical (use suction and withholding of oral feedings meanwhile to prevent pulmonary aspiration)

### Pyloric Stenosis (congenital)

#### Definition

The gastric outlet is obstructed by pyloric hypertrophy, M >> F

#### Clinical Features

*Progressive, non-bilious projectile vomiting* in a child who remains hungry, 4-6 weeks old. Weight loss + dehydration common. Might feel an olive-shaped mass adjacent to umbilicus after vomiting.

#### Lab Findings

U/S, barium swallow will show "string-sign"

#### Treatment

Surgery

### Phenylketonuria (metabolic)

#### Definition

Rare AR inability to metabolize the protein phenylalanine

#### Consequences

Phenylalanyne and its metabolites accumulate in the CNS --> causing MR and movement disorders

#### How is it detected/managed early on?

Screening at birth

#### Consequences if not detected by age 3?

Irreversible brain damage

### Phenylketonuria (metabolic) (cont)

#### Management

Low-phenylalanine diet + tyrosine supplement. Strict protein intake for life.

### Diaphragmatic hernia (congenital)

#### Clinical presentation in newborn

Immediate respiratory distress \*the affected lung is compressed by pressure from abdominal contents)

#### Diagnosis

If bowel sounds are heard in the chest

#### Radiography

Shows loops of bowel in the involved hemithorax + displacement of heart and mediastinal structures

#### Treatment

Surgery

### Bowel Atresia (congenital)

- Occurs in ileum mosts commonly
- Presents with signs of obstruction in first few days of life

### Hirschsprung's disease

#### AKA

Congenital megacolon

#### Definition

Congenital absence of Meissner's and Auerbach's autonomic plexuses enervating the bowel wall

#### Symptoms

Constipation, obstipation, vomiting, failure to thrive

#### Treatment

Surgical resection of affected bowel

