Chapter Outline

Structural defects
  Cleft lip and cleft palate
  Esophageal atresia and tracheoesophageal fistula
  Hernias

Obstructive disorders
  Hypertrophic pyloric stenosis
  Intussusception
  Anorectal malformations
Diarrhea is a symptom that results disorders involving digestive, absorptive, and secretory function. Diarrhea is caused by abnormal intestinal water and electrolyte transport.

Diarrheal disturbance involve the stomach and intestine (gastroentritis), the small intestine (enteritis), the colon (colitis) or the colon and intestine (enterocolitis). Diarrhea is classified as acute or chronic.
ACUTA DIARRHEA: The leading cause of illness in children younger than 5 years of age, is defined as sudden increase in frequency and a change in consistency of stools, often caused by an infectious agent in the G1 tract. It may be associated with upper respiratory or urinary tract infections. Antibiotic therapy or laxative use. Acute diarrhea is usually self-limited (<14 days duration).
Diarrhea

ROTAVIRUS is the most important cause of serious of gastroenteritis among children. salmonella, shigella, and campylobacter organisms are the most frequently isolated bacterial pathogens.

Antibiotic administration is frequently associated with diarrhea because antibiotics alter the normal intestinal flora, resulting in an overgrowth of other bacteria.
Diarrhea

The major goals in the management of acute diarrhea include:

(1) assessment of fluid and electrolyte imbalance

(2) rehydration

(3) maintenance fluid therapy

(4) reintroduction of an adequate diet

Infants and children with acute diarrhea and dehydration should be treated first with oral rehydration therapy (ORT). ORT is one of the major worldwide health care advances.
Certain conditions predispose children to a high prevalence of GERD, including:

- Neurologic impairment, hiatal hernia and repaired esophageal atresia (EA)

**Pathophysiology**

Although the pathogenesis of GER is multifactorial, its primary causative mechanism likely involves inappropriate transient relaxation of the lower esophageal sphincter.
Clinical manifestations

Symptoms in infants

- Spitting up, regurgitation, vomiting (may be forceful)
- Excessive crying, irritability, arching of the back with neck extension stiffening
- May be “silent” (no clinical signs observed)
- Weight loss, growth failure (failure to thrive)
- Respiratory problems cough wheeze stridor, gagging, choking with feeding
- Hematemesis - apnea
Appendicitis

Diagnostic Evaluation

The diagnosis is based primarily on the history and physical examination.

Pain is (usually periumbilical pain) usually descent to the lower right quadrant. The most intense site of pain may be at McBurney point, located at a point midway between the anterior superior iliac crest and the umbilicus.

Rebound tenderness: pain when pressure on the abdomen is quickly removed, occurs with peritoneal inflammation.
Laboratory studies usually include:

1- CBC, urine analysis.
2- WBC count greater than 10,000/mm.
3- Ultrasonography

**Therapeutic management**

Treatment of appendicitis before perforation include

1- Rehydration
2- Antibiotic
3- Surgical removal of the appendix (appendectomy).

Laparoscopic surgery is now commonly used to treat no perforated.

Recovery is rapid and if no complications occur, the hospital stay is short.
Structural Defects (Cleft Lip & Cleft palate)

Clefts of the lip (CL) and palate (CP) are facial malformations that occur during embryonic development and are the most common congenital deformities. They may appear separately or, more often, together.

CL results from failure of the maxillary median nasal processes to fuse. CL can be unilateral or bilateral.
Esophageal Atresia and Tracheoesophageal Fistula

Diagram:
- Normal Anatomy
- Atresia with distal Fistula
- Atresia with double Fistula
- Atresia with proximal Fistula
- Atresia
- Fistula
Omphalocele

Protrusion of intraabdominal viscera into base of umbilical cord; sac covered with peritoneum without skin
Intussusception is the most common cause of intestinal obstruction in children between age 3 months and 3 years.

- More common in boys than in girls
- More common in children with cystic fibrosis
- Generally, the cause is not known
- More than 90% of intussusceptions do not have a pathologic lead point such as a polyp, lymphoma, or Meckel diverticulum
- The idiopathic cause may be caused by hypertrophy of intestinal lymphoid tissue secondary to viral infection.
Enterobiasis, or pinworms, caused by the nematode enterobius vermicularis, is the most common helminthic infection in the United States.

**Diagnostic Evaluation**

Diagnosis is most commonly made from the tape test. Repeated tests to collect eggs may be necessary, and if there is a possibility that other family members may be infected, a tape test should be performed on them.
Enterobiasis (Pinworms)

Clinical manifestations of pinworms

Intense perianal itching evidence itching in young children includes the following:
- General irritability
- Restlessness
- Poor sleep
- Bed-wetting
- Distractibility
- Short attention span

Perianal dermatitis and excoriation secondary to itching if worms migrate, possible vaginal and urethra infection