Newborn GI

Nursing 201: Nursing Care of Special Populations

A&P

GI system includes:

Disruption of function affects _____ status.

Pediatric Assessment

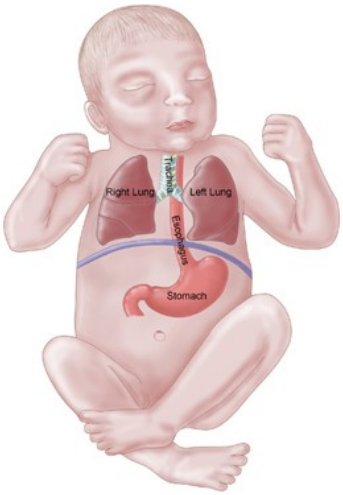
Tracheoesophageal Fistula/ Esophageal Atresia

Atresia- upper part of esophagus does not connect with lower esophagus and stomach; "blockage"

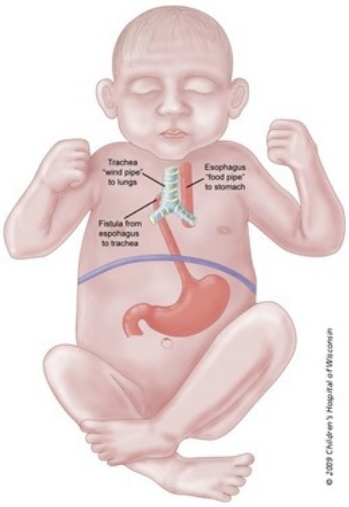
Fistula- abnormal connection between the upper part of the esophagus and the trachea; "abnormal connection

- Can occur together but sometimes can have one or another
- Males _____ females
- Most common GI birth defect
- Associated with other birth defects

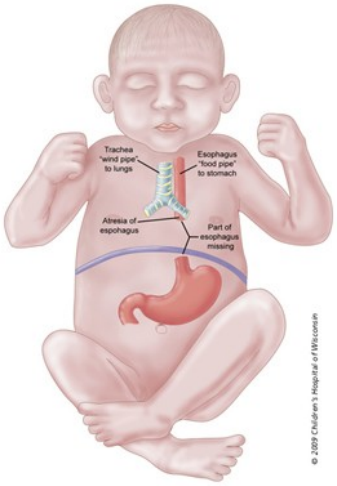
Normal



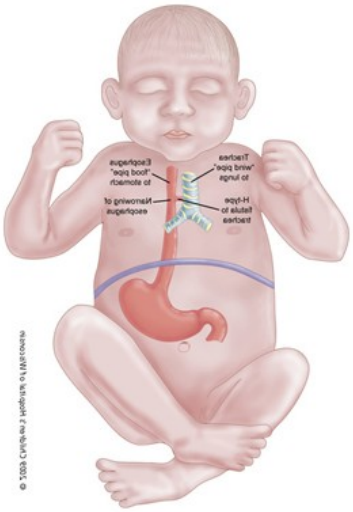
EA with distal TEF



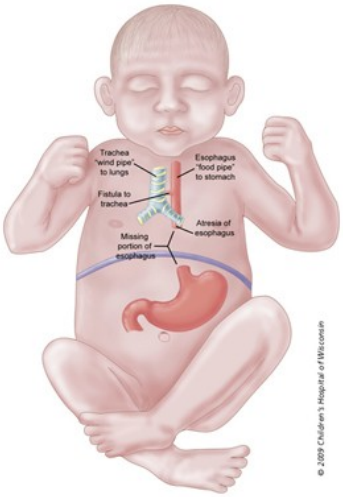
Isolated EA



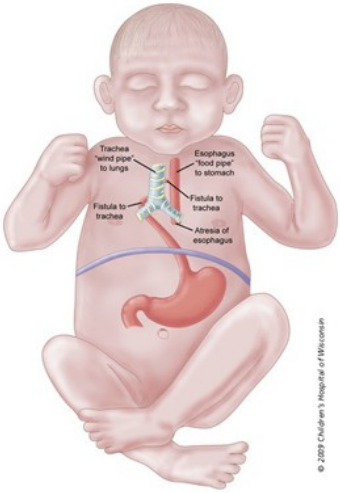
Isolated TEF



EA with proximal TE



EA with double TEF



- Clinical Presentation:
    - Polyhydraminos in utero
    - Difficulty handling secretions
    - Cyanosis with feeding
    - Resistance with passage of feeding tube
    - Continual choking with feeding
- Diagnostics
    -
    -
    -
    -
    -
    -
- Nursing Care
    - Prevent aspiration!!
    - HOB Elevated
    - NPO
    - IVF
- Surgical intervention is required
- R/F
- May require esophageal dilation
- Will have Chest Tube
- Excellent prognosis

Gastroesophageal Reflux

- Signs and Symptoms
    - Eating is unpleasant
    -
    - Slow weight gain
    - Irritability
    - Chronic cough
    - Frequent pneumonia
    - Sleep interruption

Diagnostics

- Weight
- Stool for occult blood
- CXR for respiratory symptoms
- Endoscopy

Treatment

- H2 Blocker
- PPI
- Severe-
- Avoid trigger foods
- Position HOB up
-

Pyloric Stenosis

- Pylorus muscle thickens
-
- Identified
- S/Sx:

Diagnostics:

- Symptomatically
-
-
- Olive size pyloric mass noted

Treatment

- Surgical intervention: Pyloromyotomy
-
-

Volvulus

-
- Malrotation
- Most frequent in the first _____ months of life

Symptoms

-
-
- Abdominal distention
-
- Tachycardia, tachypnea

Diagnostics

- CT Abdomen
- Upper GI Series
- CBC with Electrolytes

Treatment

-
-

Necrotizing Enterocolitis (NEC)

-
-
- Premature infants most common

Symptoms

-
-
-
-
-
-

Diagnostics

- X-ray
- CBC, CRP
- Stool for occult blood
- Abdominal girth measurements

Treatment

- NPO
- TPN prn
- Abx
- Possible surgical intervention required if perforated

Hirschsprung's Disease

- Congenital
-
    - o
-
- Infant typically cannot pass stool in first days after birth
    - o
    - o
- Males > FM

Symptoms

- Constipation from birth
-
-
- Vomiting
- Poor weight gain

Diagnostics

- Empty rectum on digital exam
- KUB
- Rectal biopsy for definitive diagnosis

Tx/ Complications

Omphalocele/ Gastroschisis

Omphalocele	Gastroschisis

Imperforated Anus

- Congenital
- Opening of anus is blocked
    -
    -
    -

Symptoms

-
- No stool 24-48 hours of birth
-
- Stool passes out of vagina, penis, scrotum, urethra
- Abdominal distention

Treatment- surgical

Cleft Lip & Palate

- Facial and oral malformations that occur very early in pregnancy
    - Lip:
        -
    - Palate:
        - Hard palate- bony front portion
        - Soft palate- soft portion of roof of mouth
- Can have cleft lip without cleft palate, cleft palate without a cleft lip, or both together

Diagnosis

-
-

Treatment- surgical (often times, multiple surgeries)

Post-op: Manage _____!

Complications

- Nutrition
- Ear Infections
- Speech Difficulties
- Dental Issues

<u>Failure to Thrive (FTT)</u>

- Growth Failure"
- Inadequate growth resulting from an inability to obtain or use calories required for growth
- Weight (and sometimes height) that falls below the 5th percentile for child's age
- Pattern and persistent deviation looked at

Patho:

- Inadequate caloric intake: incorrect formula preparation, neglect, food fads, excessive juice consumption, lack of food availability, breastfeeding problems, behavioral problems, CNS issues affecting intake
- Inadequate absorption: food allergy, malabsorption, pyloric stenosis, GI atresia, inborn areas of metabolism
- Excessive caloric expenditure: hyperthyroidism, malignancy, CHD, chronic pulmonary disease, immunodeficiency
- High Risk: Born preterm, Low birth weight, IUGR, Poverty, Neglect, Inadequate nutritional knowledge, Family stress, Difficult latch/ uncoordinated suck/swallow with breastfeeding

Diagnosis:

- Weight and height
- Health and dietary history

- Food log
- Child's activity level
- Perceived food allergies
- Assessment of household rituals/ behaviors with mealtime
- Growth patterns of patterns/ siblings
- Labs to r/o organic problems (usually of little value)
    - I.e. lead toxicity, anemia, ova and parasites)

Clinical Manifestations:

- Growth failure
- Developmental delays
- Withdrawn behavior
- Feeding or eating disorders
- Avoidance of eye contact
- Minimal smiling

Treatment:

- Reversing cause
- Providing sufficient calories to support "catch up" growth
    - Calorie dense foods
- MVI/ dietary supplements prn

Multidisciplinary (depending on cause)

- Physician, nurse, dietician, child life specialist, OT, pediatric feeding specialist, social workers, mental health professional

Prognosis:

- Related to cause
- R/F smaller stature, delayed development, eating and behavioral issues