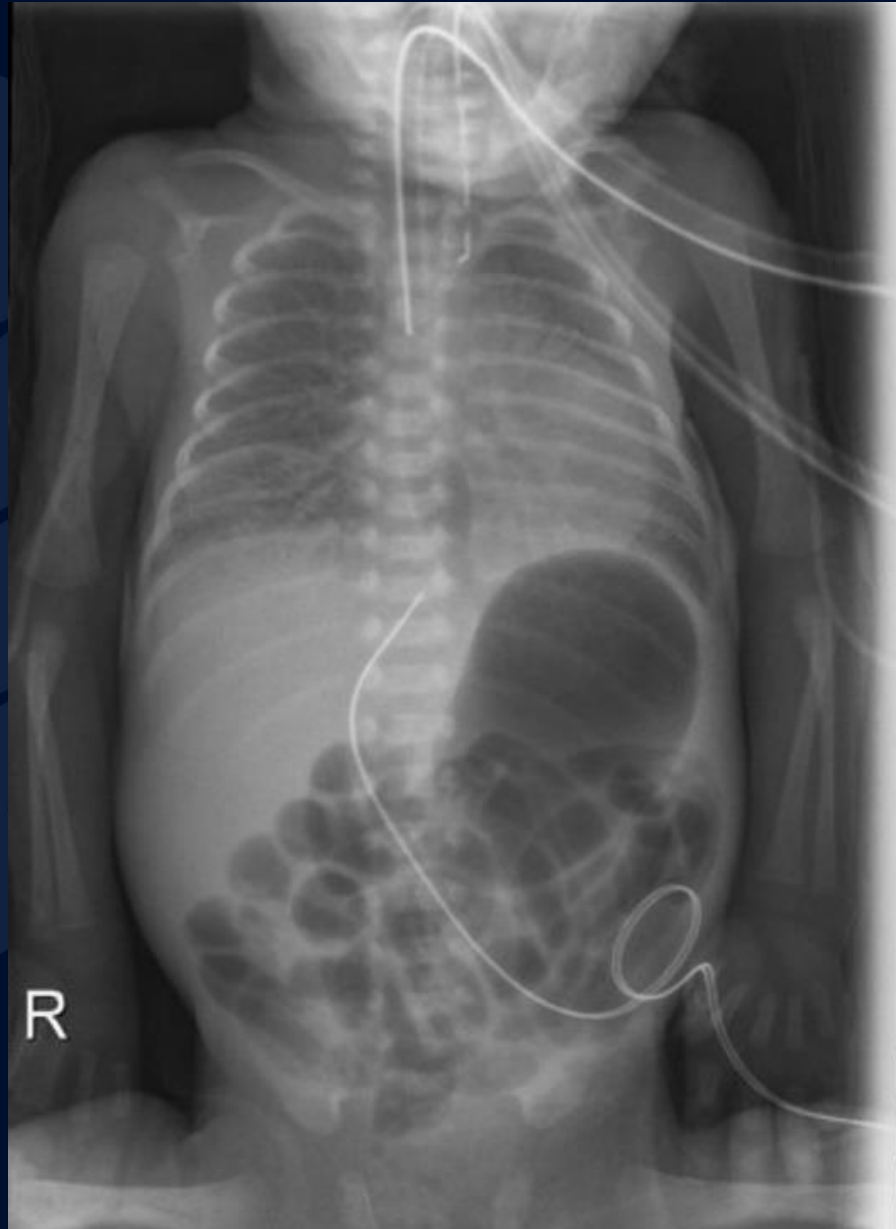


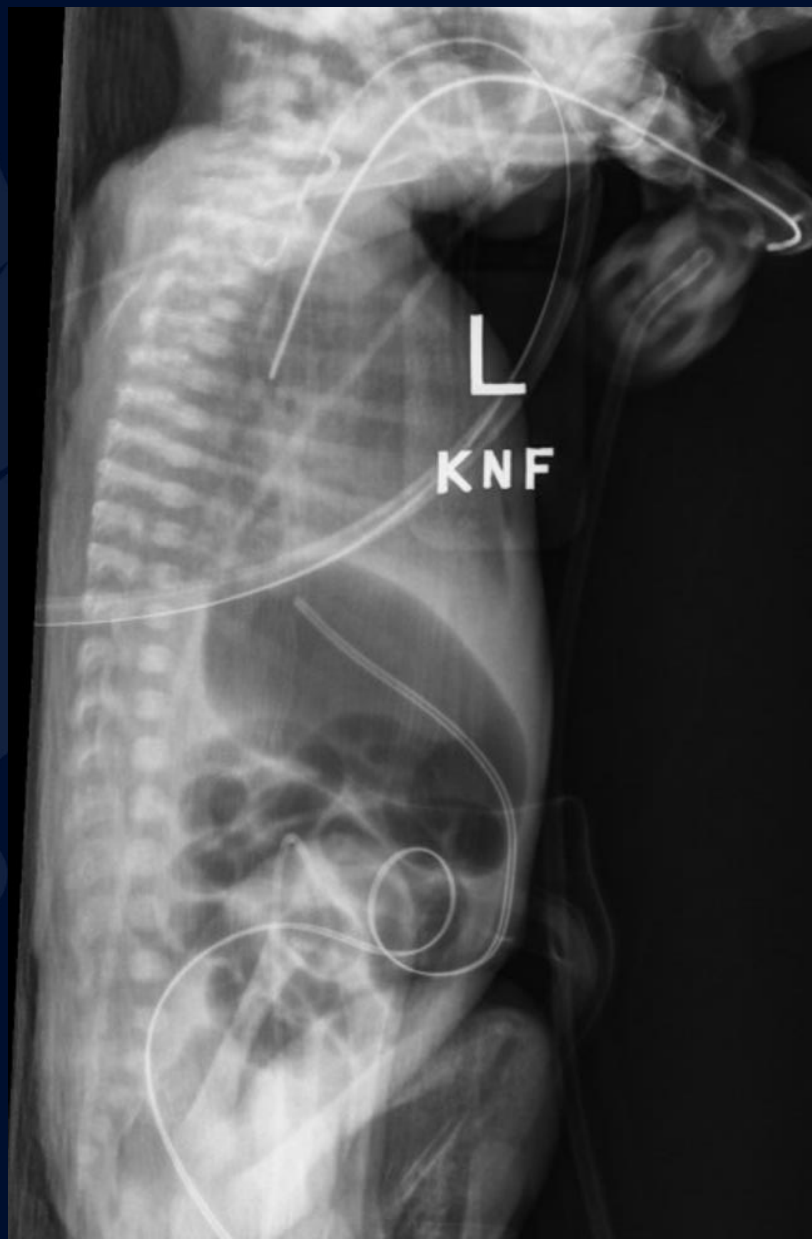
1-day-old female with respiratory distress

Sarishka Desai, BA
Racquel Helsing, MD

Chest and Abdomen Radiograph – AP View



Chest and Abdomen Radiograph – Lateral View

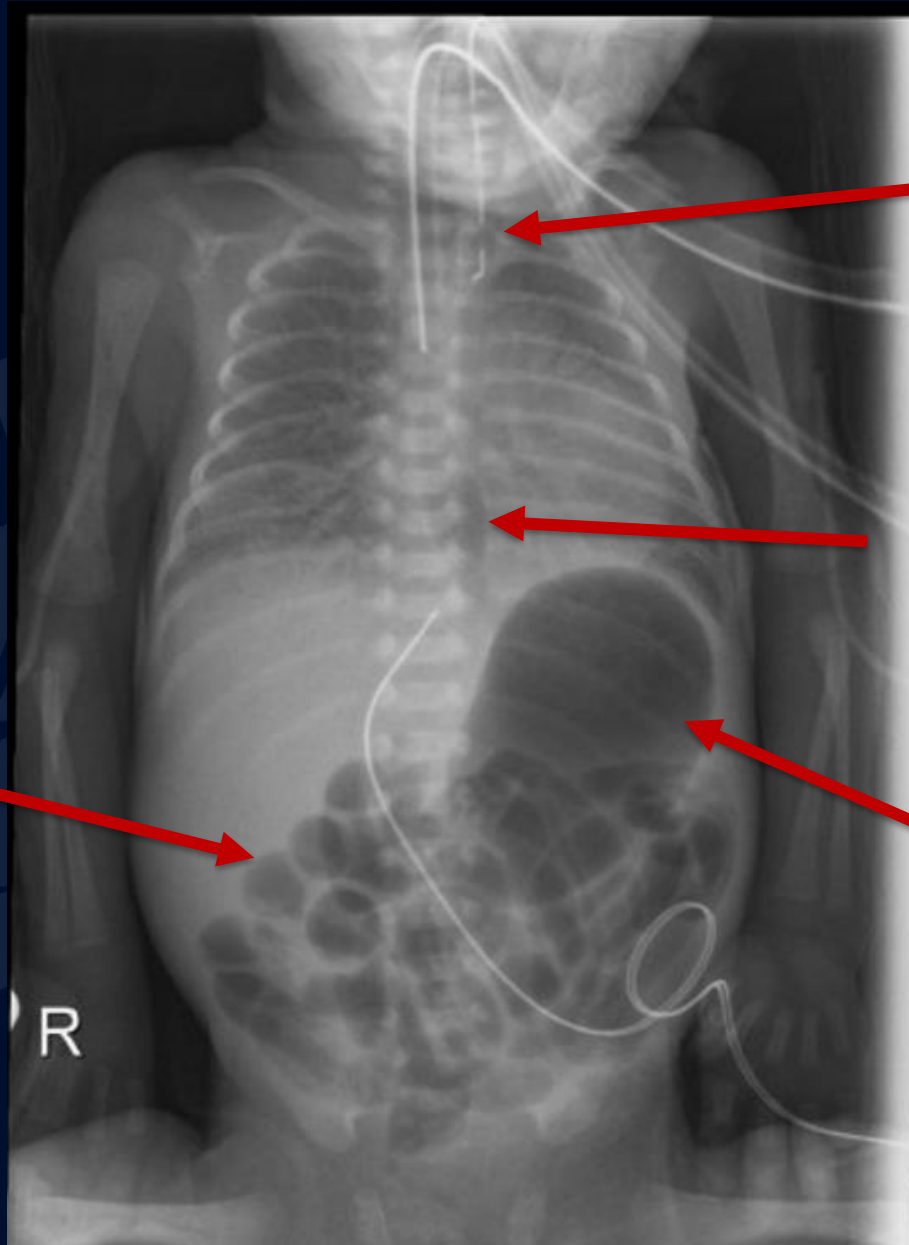


A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

?

Esophageal Atresia (Type C)

Chest and Abdomen Radiograph – AP View



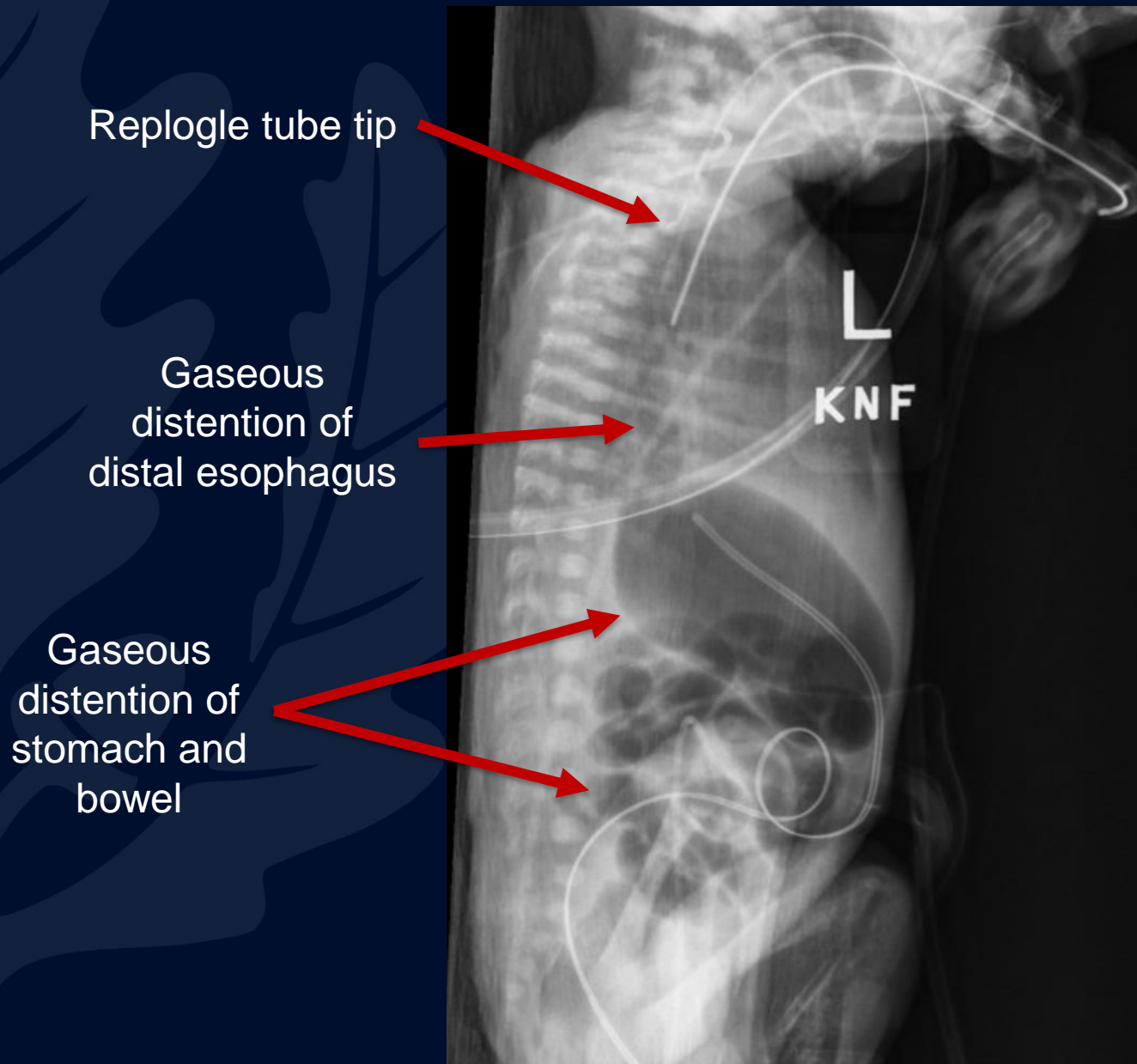
Nasogastric tube
terminating in
esophageal
pouch

Gaseous
distention of
distal esophagus

Gaseous
distension of
bowel

Gaseous
distension of
stomach

Chest and Abdomen Radiograph – Lateral View



Type C Esophageal Atresia (EA)

- **Pathophysiology**
 - EA and tracheoesophageal fistula (TEF) are caused by a defect in the lateral septation process of the foregut into the esophagus and trachea.
 - Type C atresia (consisting of a proximal esophageal pouch and a distal TEF) is the most common subtype of EA, accounting for ~84% of cases.
 - Clinical associations include polyhydramnios, which occurs in ~2/3 of pregnancies with EA/TEF, as well as the VACTERL association.
- **Diagnosis**
 - In affected infants, a rubber catheter cannot be passed farther than 10 -15 cm into the esophagus
- **Management / Treatment**
 - Replogle tube is used to continuously drain saliva from the esophageal pouch
 - Primary anastomosis of the esophageal segments is performed for EA, typically as soon as possible. If the distance between the esophageal segments is large, primary repair may not be possible. In that scenario, repair is usually delayed 2-9 months to allow for esophageal growth that would then permit primary repair.
 - Treatment of TEF consists of surgical separation of the trachea and esophagus by ligation of the fistula.

Differential

- Pharyngeal pseudodiverticulum
- Laryngotracheoesophageal clefts
- Esophageal webs/rings
- Esophageal strictures
- Tubular esophageal duplications
- Congenital short esophagus
- Tracheal agenesis

Imaging Findings

Radiograph

- Type C esophageal atresia on an AP chest radiograph demonstrates a catheter curled in the upper esophageal pouch.
- A distal TEF may be suspected based the presence of a gas-filled gastrointestinal tract.
- When the diagnosis is uncertain and/or proximal TEF is suspected, a small amount of water-soluble contrast material can be placed in the esophageal pouch under fluoroscopic guidance.
 - Barium should NOT be used as the contrast agent, because it can cause pneumonitis if aspirated into the lungs.

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