

Congenital Diaphragmatic Hernia (CDH)

discontinuity of the diaphragm

Diaphragm

- septum transversum: central tendon
- Esophageal Mesentery: medial Border
- lateral chest wall Ms: lateral Border
- pleuroperitoneal folds: post. Border

(neonate)

- Pulmonary Hypoplasia
- persistent pulmonary HT
 - ↳ R→L shunting (PDA)
 - ↳ Hypoxemia → Acidosis
- cardio resp. Failure
- mortality (fetus/neonate)
- GI / resp manifestations (infants)
- Asymptomatic (infants)

dx: - prenatal: US/MRI

- postnatal: - clinical/PE:
 - Resp distress
 - scaphoid Abdomen (empty)
 - ↓ breath sounds
 - bowel sounds in thorax
- Xray ~~diagnostic~~
- Infant: - Resp/GI symptoms
- Xray

↓ Survival Rate:

- other malformations
- R-sided effects
 - ↳ Liver herniation
- <30% lung vol
- ↓ Lung Area: Head Circumference

TYPES left

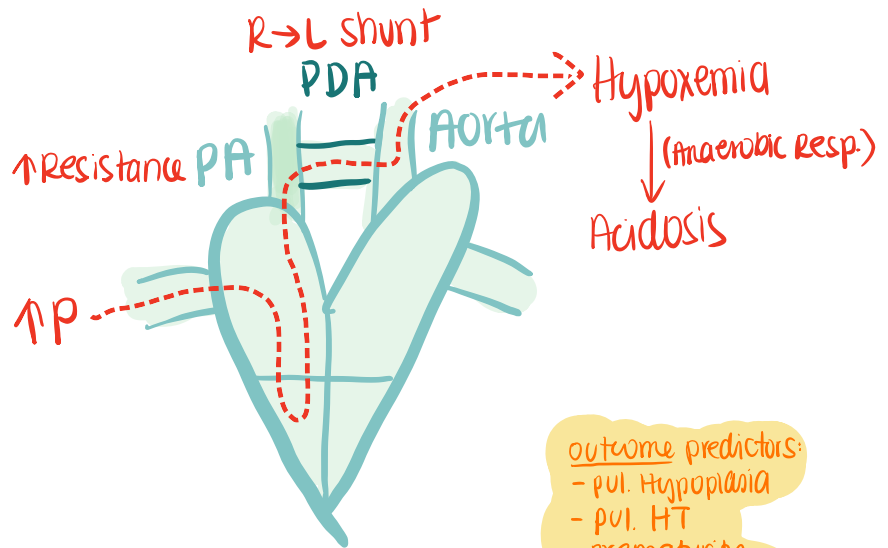
Postero-lateral (Bochdalek) **mc**

Ant. (Morgagni-Larrey)

Central

Diaphragm Agenesis

Diaphragm Eventration (intact attachments but lax Ms/IVs.)



outcome predictors:

- pul. Hypoplasia
- pul. HT
- prematurity
- other anomalies

mx:

prenatal

- screen other malformations
- Fetal echo
- genetic studies
- In utero fetal therapy
- Fam counseling
- Delivery planning

postnatal

- lung compression
- ventilation
- Cardiovascular support
- correct pH
- correct pulm HT
- when stable: sx
 - ↳ open
 - ↳ thorascopic

↓
X EMERGENT

Esophageal Atresia (EA)

4th - 7th gestation wk: foregut → dorsal: Esophageal
 → ventral: Resp. → Tracheoesophageal septum

failure

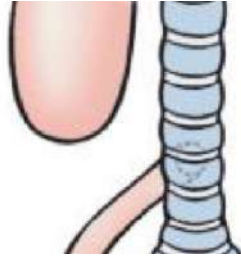
- polyhydramnios

→ Atresia: x gastric bubble

→ Fistula: ↑ gastric bubble

- ↑ salivation

- NG tube x pass



EA w/ TEF (mc)

dx: Xray

tx: - suctioning

↓ - Sx depend on gap b/w esophageal ends

EMERGENT

→ < 2 vertebrae long anastomosis

→ 2-6 vertebrae gastrostomy + delayed anastomosis

→ > 6 vertebrae gastrostomy + esophagostomy + esophageal replacement later
 (use other conduits)

Associated: screen!

Vertebral

Anorectal

Cardiac

Tracheo

Esophageal

Renal

Limb abnormalities

Surgery complications:

↳ strictures

↳ leak

↳ rewire

↳ tracheomalacia

↳ GERD