

Anatomical gap in a structure

Abnormal protrusion of an organ or body part outside its normal cavity

Hiatus hernia

Protrusion of an organ (typically the stomach) through the hiatus into the chest

Causes

Increased intra abdominal pressure

- Obesity, pregnancy, constipation, coughing, heavy lifting

Decreased muscle elasticity

- As people age the muscles of the diaphragm become less flexible and lose elasticity

Trauma

- Seatbelt injury

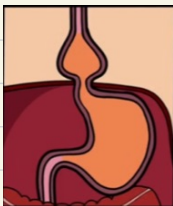
Previous surgeries

Congenital

- Significantly rare

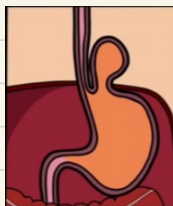
Types hiatus hernia

Sliding hernia 95%
Type 1



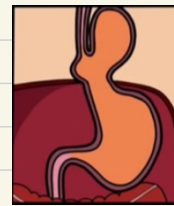
- The gastroesophageal junction is shifted upwards beyond its normal range

Paraesophageal 5%
Type 2



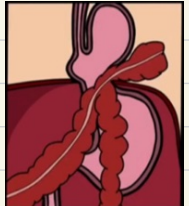
- Part of the stomach (fundus) protrudes through the hiatus, the junction stays in place

Type 3



- Mixture of both sliding and paraesophageal

Type 4



- Herniation of organs other than stomach as bowel or pancreas

Signs & Symptoms

Mostly asymptomatic especially type I

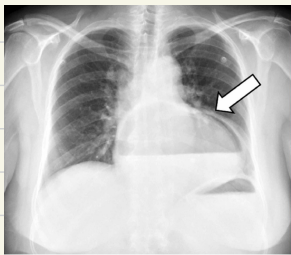
Most common cause for symptomatic patients » GERD

- Heartburn, regurgitation, acid taste, burping, nausea, vomiting » intermittent & worse after meals
- Nocturnal cough or wheeze, chest pain, dyspnea, obstruction

Diagnosis

Chest X-ray

- Air-fluid level above the diaphragm



Barium swallow

- Swallowing dye before X-ray to visualize upper GI



EGD

- Evaluate hiatus & looking for lesions

Manometry

- Measuring intraluminal pressure and the contractility movements of esophagus

Treatment

- Type I if asymptomatic » no treatment
- Type I if symptomatic (GERD) » medical therapy if didn't work hiatal hernia repair
- Lifestyle changes » losing weight, small meals, avoid meals before bed, stop smoking and alcohol, avoid tight clothing
- Medications » proton pump inhibitors, antacids, H₂ receptor blockers
- Surgery » refractory to medication or in case of complications like obstruction, ulcers, volvulus

↳ Laparoscopic Nissen fundoplication (LAP NISSEN) involves wrapping the fundus around the LES and suturing it in place

