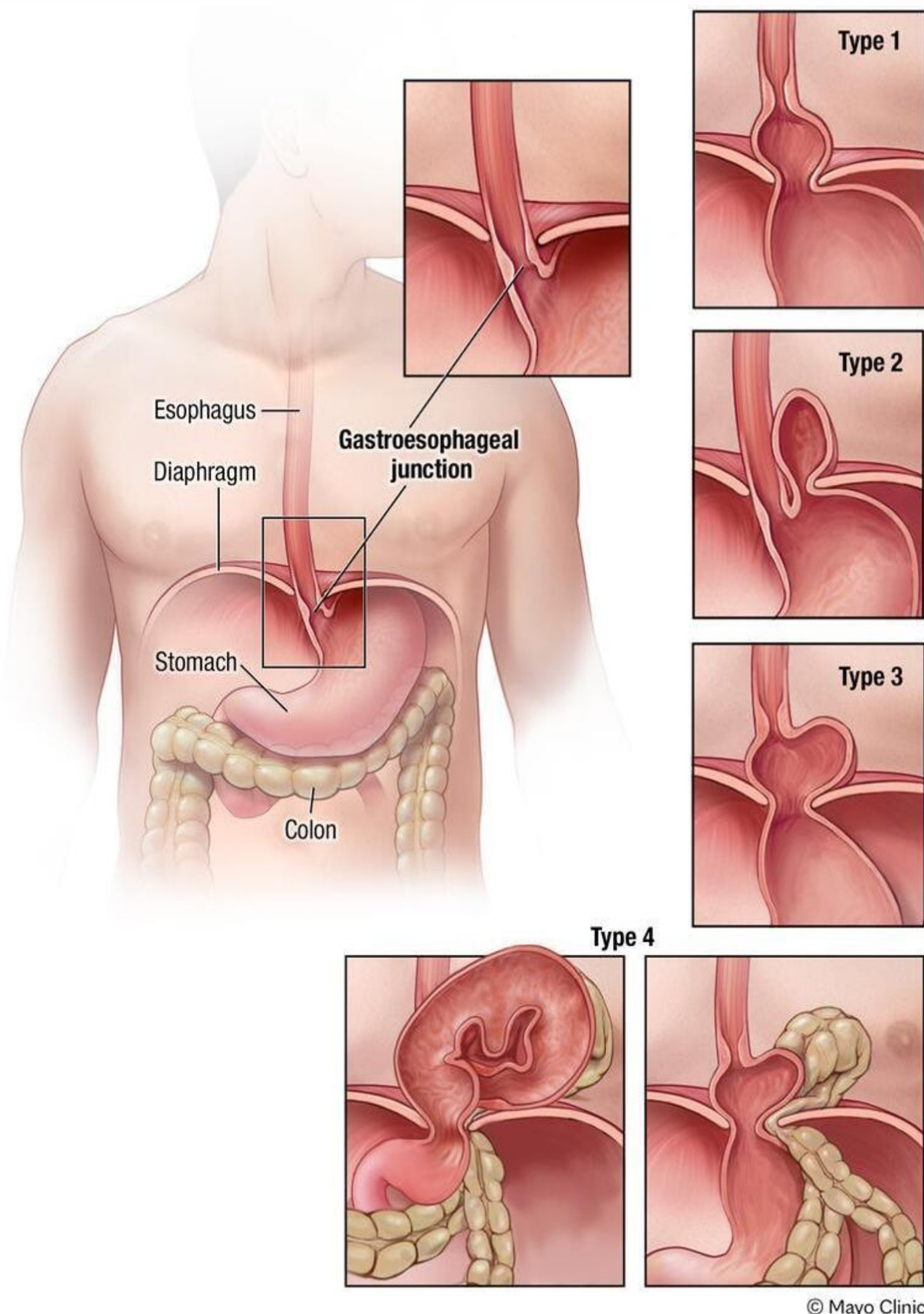


## INTRODUCTION

- Hiatal hernias occur when the stomach pushes through the crural diaphragmatic opening into the chest, compromising the lower esophageal sphincter (LES)
- Herniation can contribute to GERD
- Small hernias are often asymptomatic and managed medically
- Larger or symptomatic hernias typically require surgery
- Paraesophageal hernias more frequently require surgery to prevent complications such as volvulus
- Large hernias or those with refractory symptoms should be referred

## TYPES OF HERNIAS

- Sliding hiatal hernia (Type I): MOST COMMON - the gastroesophageal junction (GEJ) is displaced toward the hiatus
- Paraesophageal hiatal hernia (Type II): part of the stomach migrates into the mediastinum parallel to the esophagus; GEJ anatomy is maintained
- Combined hernia (Type III): both the GEJ and a portion of the stomach move into the mediastinum
- Complex hernia (Type IV): the stomach and additional organ, such as colon or spleen, herniate into the chest



## SYMPTOMS/COMPLICATIONS

- Symptoms include heartburn, regurgitation, difficulty swallowing, early satiety, bloating, or chronic cough
- Complications include esophagitis, Barrett's esophagus, aspiration, chronic lung disease, and volvulus

## RISK FACTORS

- Older age
- Obesity
- Pregnancy
- Chronic constipation
- Previous surgery
- COPD
- Trauma
- Genetic predisposition

## DIAGNOSIS

- EGD: GOLD STANDARD for evaluating hiatal and paraesophageal hernias.
- Barium swallow/esophagram: provides basic structural and mechanical information
- Esophageal manometry: evaluates esophageal motility in detail
- pH monitoring: measures acid reflux, with 24-hour pH monitoring GOLD STANDARD, wireless monitoring an option
- Impedance testing: measures volume and flow of reflux, detecting non-acidic reflux
- Gastric emptying study: measures the emptying of the stomach at 1, 2 and 4 hrs to evaluate for delayed gastric emptying

## TREATMENT OPTIONS

- Non-surgical management: dietary modifications, weight loss, and pharmacological therapy; maximize medications and lifestyles
- Surgical interventions: indicated for severe or refractory symptoms, complications like esophagitis or Barrett's esophagus, and paraesophageal hernias (due to higher risk of volvulus); laparoscopic hiatal hernia repair with fundoplication is the GOLD STANDARD
- Surgical Guidelines The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) recommends operative repairs for all symptomatic hernias and asymptomatic large hernias in patients younger than 60 and otherwise healthy
- Paraesophageal hernias have increased risk of volvulus and require earlier surgical intervention
- Recurrence rates range from 15-60%, with about 10% requiring further surgical intervention (re-do surgery vs Roux-en-Y gastric bypass)
- Risk factors for recurrence include older age, shorter stature, heavy lifting, vomiting post-surgery, and connective tissue disorders

## CONCLUSION

- Hiatal and paraesophageal hernias are of significant concern due to the potential to cause severe symptoms and complications
- Understanding the pathophysiology, risk factors, diagnostic techniques, and treatment is essential for effective management
- Timely surgical referral can improve outcomes and quality of life

## REFERENCES

