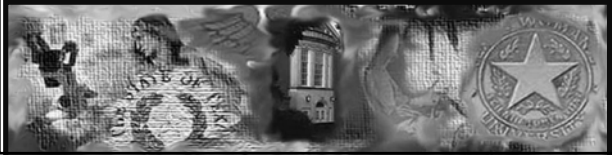


# Gastroesophageal Reflux Disease

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NURS 5415 – Women's Health III



## GI Objectives

- Identify the pathophysiology, risk factors, presenting signs and symptoms, and differential diagnosis for multiple GI disorders such as gastroenteritis, PUD, GERD, IBS, and IBD.
- Evaluate use of diagnostic/lab tests for the conditions listed in objective #1.
- Discuss the treatment of H. Pylori.

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## GI Objectives

- Discuss treatment options for the diagnoses listed in #1 objective.
- Identify findings and treatment plan for IBD primarily Crohn's and Ulcerative Colitis.
- Learning Experiences:
  - Reading list for course
  - Case studies

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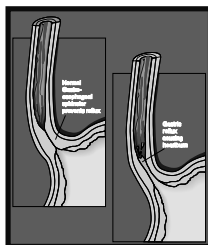
## Definition

- Effortless return of stomach and duodenal contents into the esophagus
- Most often related to inappropriate relaxation of the LES
- Increase in intra-abdominal pressure
- Classified as peptic ulcer disease

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## Incidence

- Extremely common
- About 20% of adults report weekly heartburn; 50% reflux esophagitis
- About 10% have daily symptoms; most have mild disease



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## Essentials of diagnosis

- Heartburn; may be exacerbated by meals, bending, or recumbency
- Clinical diagnosis; typical uncomplicated cases do not require diagnostic studies
- Endoscopy demonstrates abnormalities in < 50% of patients
- Barium esophagoscopy seldom helpful

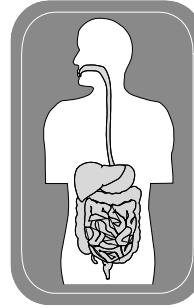
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## Contributing factors

- Incompetent lower esophageal sphincter
- Irritant effects of refluxate
- Abnormal esophageal clearance
- Delayed gastric emptying
- During pregnancy increased pressure from growing baby
- Hiatal hernia: higher amounts of reflux

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## Clinical presentation



- Heartburn
- Chest heaviness
- Regurgitation of fluid or food particles
- Dysphagia or odynophagia
- Respiratory problems

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## Diagnostic Studies

- PE and lab data are normal in uncomplicated disease
- May treat uncomplicated patients empirically for 4 weeks without diagnostic tests
- Further studies for complicated patients or those unresponsive to empirical therapy

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## Special examinations

- Upper endoscopy
- Barium esophagography
- Ambulatory esophageal pH monitoring
- Esophageal manometry

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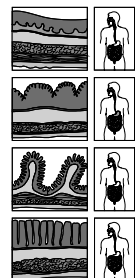
## Differential diagnosis

- Myocardial infarction
- Esophageal spasm
- Cholelithiasis
- Angina pectoris
- Peptic ulcer disease
- Nonulcer dyspepsia
- Reflux erosive esophagitis: pill induced damage, radiation esophagitis

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## Complications

- Barrett's esophagus
  - normal squamous epithelium of esophagus replaced by a metaplastic columnar epithelium
  - 10% of patients
- Peptic stricture
  - 10% of patients
  - solid food dysphagia



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## Medical Treatment of GERD

Step 1	Lifestyle modifications
Step 2	H2 receptor antagonist therapy
Step 3	Proton pump inhibitors

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## Lifestyle modifications

- Avoid foods that affect LES pressure or irritate the esophagus
- Avoid overeating
- Lose weight if needed
- Elevate head of bed on 6 inch blocks or wedge



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## Lifestyle modifications

- Avoid lying down within 3 hours after meals
- Avoid acidic foods
- Avoid foods that relax LES/delay gastric emptying (fatty foods, peppermint, chocolate)
- Avoid alcohol and smoking
- Avoid constrictive clothing

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## Pharmacological approaches

- Antacids or Gaviscon
- H2 receptor antagonists:  
Ranitidine 150 mg bid; cimetidine 400 mg bid; famotidine 20 mg bid; nizatidine 150 mg bid; increase doses for erosive esophagitis
- Proton pump inhibitors: after 6 weeks of H2 antagonists with continued symptoms or esophagoscopy; 8-12 week course of omeprazole 20-40 mg qd or other PPI. Maintain chronic therapy.

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## Promotility agent

- Cisapride (10 mg qid) may cause or exacerbate QT prolongation & cause arrhythmias
- Available only through a limited access protocol
- Contact Janssen at (877) 795-4247 for guidelines on patient qualification

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## Surgical treatment

- Refer adolescents for possible surgery for growth deficiency, esophagitis or esophageal stricture, apneic spells or chronic pulmonary disease
- Surgical fundoplication: relief of symptoms and healing of esophagitis in > 90% of selected patients; performed laparoscopically; is more cost-effective than medical costs after 10 years

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## Follow up by WHNP

- Re-evaluate adult in 1-2 weeks; if symptoms controlled, full course of therapy for 8 weeks
- Re-evaluate infant in 4 weeks for resolution
- After 8 weeks, reduce adult to chronic therapy (usually one dose per day)
- If still symptomatic, refer to gastroenterologist

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## Conclusion

- GERD is a frequent complaint in primary care
- The role of the NP includes assessment, counseling, treatment, and referral when appropriate



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**Thank you!**  
**Dr. Susan Chaney**

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