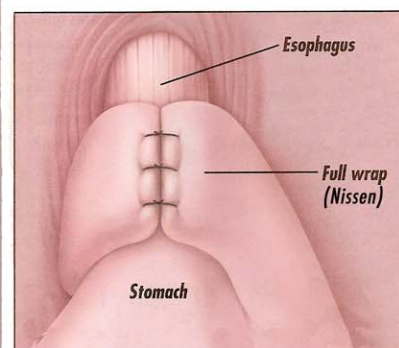
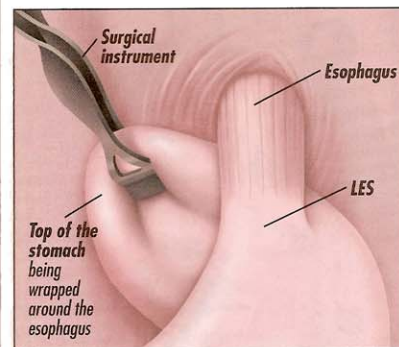
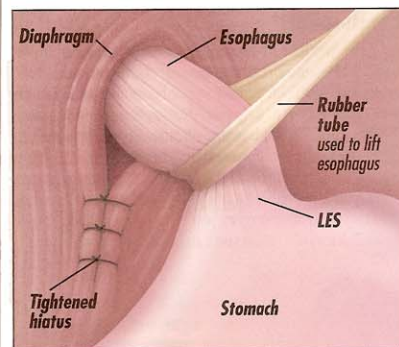


# Gastroesophageal Reflux Disease Hiatal or Paraesophageal Hernia

## Symptoms May Include

1. Heartburn
2. Acid taste in mouth
3. Regurgitation of food
4. Belching
5. Pain in the upper abdomen or chest
6. Worsening of symptoms when bending over or lying down
7. Chronic cough and hoarseness
8. Difficulty swallowing



## Alternatives to Surgery

1. Lifestyle changes
  - A. Watch what you eat
  - B. Sleep with head of bed raised
  - C. Don't drink alcohol or smoke
  - D. Lose weight
2. Medications
  - A. Antacids
  - B. H2 blocks
  - C. Proton pump inhibitors (PPI's)
3. Endoluminal therapies
  - \*Currently experimental

## Risks of Surgery

### General

1. Blood Clots (DVT/PE)
2. Pneumonia
3. Heart Attack
4. Stroke
5. Bleeding
6. Infection

### Specific

1. Difficulty swallowing
2. "Slipped wrap"
3. Recurrence of hernia
4. Failure to completely eliminate GERD (15%)
5. Perforation of stomach or esophagus
6. Increased gas or bloating
7. Difficulty/inability to burp/vomit
8. Injury to spleen or liver

## Post Op Expectations

1. No heavy lifting for 4-6 weeks
2. Soft, mushy food for 2-4 weeks-especially avoid meats and breads
3. Chew food well
4. Decreased stomach capacity
5. Eat smaller meals more frequently

## Indications for Surgery

1. Abnormal PH study
2. Changes in esophageal lining due to acid exposure (inflammation, Barrett's Esophagus, strictures)
3. Worsening symptoms despite maximum medical therapy
4. Desire to eliminate long term medication usage

## Operative Treatment

1. Fundoplication
  - \*Complete (Nissen) vs. partial wrap (Toupet)
2. Hernia repair
  - \*Occasionally requires mesh
3. Laparoscopic vs. Open
4. Occasionally requires lengthening of the esophagus

## Pre-operative Evaluation

Usually includes several of these:

1. EGD
2. PH study
3. Manometry
4. Barium swallow

