Gastroesophageal Reflux Disease (GERD)

Read this handout to learn about:

• what gastroesophageal reflux (GERD) is
• signs and symptoms
• how your doctor will know if you have it
• tests you may need
• treatments
• where to get more information

What is Gastroesophageal reflux disease (GERD)?
“Gastroesophageal reflux” (gas-tro-ee-sof-a-gee-ul ree-fluhk-s) disease or GERD is also known as acid reflux. It happens when stomach content flows back into your foodpipe (esophagus). This is the tube that leads from your mouth to your stomach. This can be due to weakening of the point where the esophagus meets the stomach (the lower esophageal sphincter), or problems with the squeezing of the muscles of the esophagus, or stomach.
It is thought that there is a strong link between GERD and interstitial lung diseases (ILD). The reason for this is not known.

- It is possible that reflux of stomach contents into the lungs may cause lung disease because the stomach acid and enzymes may damage lung tissue.
- In some diseases, such as scleroderma, both the lungs and the esophagus are affected by the illness, causing both GERD and ILD.

What are the signs and symptoms of GERD?
The symptoms of GERD are mostly because of irritation to the esophagus when there is acid reflux from the stomach. Symptoms of GERD can also be caused by food and non-acid digestive fluids irritating the esophagus, or the reflux of partly digested food up the esophagus to the throat. This is called regurgitation (ree-ger-ji-tey-shun).

Common symptoms and signs of GERD are:
- heartburn (a burning feeling in the centre of your chest)
- regurgitation of partly digested food from your stomach into your throat
- acid or sour taste in your throat
- chest pain
- cough

Less common symptoms are:
- stomach pain, sore throat, hoarse voice, trouble swallowing, painful swallowing, recurrent pneumonia (lung infection), chronic sinus infection, feeling like you have a lump in your throat
How will my doctor know if I have GERD?

To find out if you have GERD, your doctor will talk to you about your medical history and he or she will do a physical examination.

If you have Interstitial Lung Disease (ILD), it is harder to find out if you have GERD because some people can have absent (“silent”) signs and symptoms of GERD. For people with ILD (such as people with Idiopathic Pulmonary Fibrosis), more tests may be needed to find out if you have GERD.

Some of the tests used to find out if you have GERD

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<th><strong>24 hour pH monitoring</strong></th>
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<td>This is the most direct way to measure how often you are having acid reflux.</td>
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<td>This test involves putting a thin tube into your nose and down into your esophagus. The tube is left in for 24 hours while it measures how much stomach acid is getting into your esophagus. You can eat and drink normally during this test.</td>
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<td>Most patients have very few side effects from this test. The most common is a sore throat. Once the test is complete, you will need to return to the hospital to have the tube taken out.</td>
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<th><strong>Manometry and impedance testing</strong></th>
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<td>This test measures how the muscles contract (squeeze) and food and fluid moves in your esophagus. It tells your doctor if your lower esophageal sphincter is working properly. This test is often done at the same time as a 24 hour pH monitor.</td>
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<th><strong>Barium Swallow</strong></th>
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<td>This test can help your doctor find out if you have a swallowing problem that may cause the same signs and symptoms of GERD. During this test, you will be asked to swallow some liquid contrast dye while a technician takes x-rays of your chest and neck.</td>
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Endoscopy
This test lets a gastroenterologist (a doctor who is an expert in stomach and bowel conditions) to see the esophagus using a small, flexible fiberoptic scope (video camera). You will not need to stay overnight in the hospital to do this test.

- An endoscopy tells your doctor if there is any damage to the lining of your esophagus from constant contact with stomach acid. This test may be done to see if you have chronic acid reflux, or if you are having trouble swallowing, losing weight without trying to, or you are bleeding from your stomach or upper bowels.

What is the treatment for GERD?
The treatment for GERD depends on your symptoms.

First, make changes to your diet and lifestyle to reduce your symptoms and complications of uncontrolled GERD. It is important for you to know that it is not clear whether treating your GERD will slow down the fall in lung function that happens in interstitial lung disease. But, if you do have GERD, it is important to talk to your doctor about a treatment plan that can reduce any long-term complications of uncontrolled GERD.

Lifestyle changes that you can make right now:
- Lose weight.
- Quit smoking. Ask your doctor for help if you need to.
- Avoid foods that cause acid reflux, especially close to bedtime such as caffeine, chocolate, alcohol, peppermint, and fatty or spicy foods.
- Raise the head of your bed 6 to 8 inches.
  - Use blocks of wood under the legs of the bed or, use a foam wedge under the mattress
- Avoid large and late meals.
  - Do not lie down right after eating
  - Eat your last meal of the day 3 or more hours before bedtime
Medications used to reduce the symptoms of GERD

Mild GERD

• Antacids – give short-term relief of acid reflux
  Examples: Tums®, Maalox®, Mylanta®

• Histamine blockers – reduce acid produced in the stomach, less effective than proton pump inhibitors (PPI)
  Examples: ranitidine (Zantac®), famotidine (Pepcid®), and cimetidine (Tagamet®).

Moderate to severe GERD

• Proton pump inhibitors (PPI) – reduce acid produced in the stomach
  Examples: omeprazole (Losec®), esopmeprazole (Nexium®), lansoprazole (Prevacid®), pantoprazole (Pantoloc®), and rabeprazole (Pariet®).

  These medications are generally safe and well tolerated, but if taken for long periods of time, these medications may slightly increase the risk of pneumonia (lung infections), gastrointestinal infections, or bone fracture.

• Motility Agents (Prokinetics) – These medications increase how fast stomach contents move downward. They help to empty the stomach sooner and reduce the chance of reflux into the esophagus.
  Examples: Domperidone is a prokinetic agent.

If your symptoms are not controlled with these treatments, your doctor may use a different medication, or increase the dose of your medication. In the most severe of cases, your doctor may talk with you about surgical treatment for your GERD.
Where can I find more information about GERD?
To find out more about GERD, talk to your doctor, or visit one of the following websites:

**Medline Plus**
Website: http://www.nlm.nih.gov/medlineplus
  - search for “GERD”

**UpToDate**
Website: http://www.patients.uptodate.com
  - search for “GERD”