

The Columbus Community Health Regional Sleep Disorders Center

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For more information, visit The Sleep Site (www.thesleepsite.com).

INFORMATION ON ACID REFLUX DURING SLEEP

What is GE reflux? The sensitive lining of the esophagus ("food tube, connecting the throat and stomach) cannot withstand repeated, prolonged contact with stomach acid. A special "valve" mechanism (sphincter) separating the esophagus and stomach normally prevents excessive "back flow" (reflux) of acid into the esophagus. When we're awake and upright, gravity and frequent swallowing help move refluxed acid back into the stomach. Also, swallowed saliva neutralizes the acid. Severe GE reflux occurs in many people without a hiatus hernia, and not everyone with a hiatus hernia has significant reflux, so they are not the same.

Why does GE reflux tend to be more serious during sleep? During sleep, more prolonged reflux episodes are likely. Lying flat eliminates the protective effects of gravity, and swallowing frequency is greatly reduced during sleep. Sound sleep often renders us oblivious to heartburn and other symptoms, such that reflux may be allowed to continue. In sleep, stomach acid is much more likely to back up high in the esophagus or even the throat. Asthma-like wheezing, choking, vocal cord spasms or throat closure can result. Some people even inhale the acid into their lungs during sleep, with such drastic consequences as scarring of lung tissues and lung abscesses!

What are possible symptoms of GE reflux?

- HEARTBURN
- SOUR BELCHING
- CHRONIC COUGH
- CHEST PAIN: which can mimic pain from the heart perfectly, even improving with nitroglycerine!
- FREQUENT USE OF ANTACIDS OR OTHER REMEDIES (ex: Rolaid(r), Maalox(r), Mylanta(r), Pepcid AC(r)).
- AWAKENINGS WITH BITTER TASTE, CHOKING. STRANGLING COUGHING, OR CHEST PAINS.
- WHEEZING, STRIDOROUS ("CROWING") GASPS OR VOMITING.
- NO SYMPTOMS WHATSOEVER!!

Doesn't GE reflux always cause heartburn or other symptoms? No, surprisingly not. We have documented extraordinarily prolonged, continuous pooling of acid in the esophagus lasting over four continuous hours in full wakefulness, without any symptoms at all!

Why not just take antacids? They often aren't sufficient to treat the problem and prevent damage. Also, the fact that severe reflux can occur without any symptoms (particularly in sleep) means that people may not even know when they need them.

What tests are available for GE reflux? X-rays (upper GI series) are not very sensitive, and they often miss the diagnosis. Endoscopy (looking at the esophageal lining with a scope) can show inflammation or damage to the esophagus once it has occurred. Manometry (pressure measurements) can clarify why reflux has developed. The most sensitive and specific test for GE reflux, which both documents its severity and correlates reflux episodes with symptoms, is ambulatory esophageal pH monitoring, a test very similar to 24 hour "Holter monitors" used to record heart rhythms. This safe, simple outpatient procedure can even be used in infants. It has proved invaluable at our Center.

How can GE reflux be treated?

1. **ELIMINATION OF AGGRAVATING FACTORS:** avoiding acidic and spicy foods, caffeine, alcohol, chocolate, peppermint and other dietary causes of reflux; not eating shortly before bedtime; weight loss; quitting smoking. Certain drugs (for example, some asthma drugs) can worsen reflux. Review your medications with your doctor, but don't stop prescribed medicines on your own!
2. **ELEVATING THE HEAD OF YOUR BED ON 6 INCH BLOCKS** may help: by allowing gravity to help keep stomach acid down where it belongs. (Extra pillows are not a substitute!).
3. **SPECIAL PRESCRIBED MEDICINES** may help: some by decreasing acid production, and others by stimulating downward movement of acid back into the stomach.
4. **TREATMENT OF SLEEP APNEA:** which, if present, can aggravate GE reflux.
5. **SURGERIES** are used in severe cases.

If you believe you may have significant GE reflux, what should you do?

- **ELIMINATE AGGRAVATING FACTORS AND ELEVATE THE HEAD OF THE BED AS DESCRIBED**, if at all possible.
- **CONSULT WITH YOUR FAMILY DOCTOR OR A GASTROENTEROLOGIST (STOMACH SPECIALIST).**
- **IF YOUR SYMPTOMS OF SLEEP-RELATED GE REFLUX ARE ACCOMPANIED BY ANY INDICATIONS OF SLEEP APNEA OR**

OTHER MAJOR SLEEP DISORDERS, A SLEEP EVALUATION SHOULD BE DONE IN CONJUNCTION WITH ASSESSMENT OF YOUR GE REFLUX, AT A SLEEP CENTER THAT CAN PERFORM AMBULATORY ESOPHAGEAL pH MONITORING: particularly since treatment of sleep apnea may simultaneously reduce GE reflux, thereby treating two potentially serious problems in sleep for "the price of one"!

CONTACT OUR OFFICE FOR HELP FOR GE REFLUX DURING SLEEP.

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