



Patient information:
laryngitis and throat complaints due to gastric acid

The lower esophageal sphincter (LES) is a muscular valve between the stomach and the esophagus, which prevents the return (reflux) of gastric acid up the esophagus towards the mouth. Up to 30% of people have a diaphragmatic hernia or a malfunctioning LES muscle. When a person with acid reflux lies down, the acid may reach the level of the throat and larynx. Often, this reflux occurs during sleep and doesn't typically waken the person. Patients with acid reflux may experience different sensations, either directly or indirectly, or both.

Direct sensations:

- acid belching
- heartburn

Indirect sensations:

- scratchy, dry or irritated throat (often worse in the morning and improving throughout the day)
- noticeable morning throat mucus
- throat clearing
- chronic irritative cough
- dull low-frequency morning voice, which requires longer vocal warm-ups

Treatment (Please, do all of these.)

1. **Avoid caffeine, alcohol, spicy foods, mint, citrus fruit or drinks, carbonated beverages, fatty foods** (eggs, chocolate), particularly after 2 pm. These ingredients increase the gastric acid and/or reduce the function of the lower esophagus muscle.
2. Eat the **last meal/snack of the day no fewer than 3 hours before going to sleep**. Try to eat the heavier meal in the afternoon and a lighter meal in the evening. In doing so, (1) the stomach would be relatively empty when lying down, so that there is not a lot of 'back pressure', which pushes the stomach contents to the esophagus and into the throat, and (2) the stomach would have returned to its basic level of acidity before going to sleep.
3. Place a **15 cm block under the legs of the head end of your bed** (books or wooden blocks can be used for this). This procedure puts the entire bed on a slight downward slant from head to foot (latterflex is insufficient, as it only involves raising the upper half of the body from the middle). This way, gravity assists to keep the stomach acid down in the stomach during sleep. An alternative is to place a large foam wedge under the body.



4. Furthermore, **medication** can be taken as discussed with your doctor.

It is recommended that a trial therapy with the above mentioned measures is maintained for a minimum of 2 weeks, without neglecting any of them.