Reflux without Heartburn

Basics

Reflux without heartburn occurs, of the reflux damages the nerves. As a consequence, the reflux is not perceived. 10%-15% of persons without heartburn have premalignant Barrett’s esophagus.

Causes

Reflux occurs because of the dysfunction of the anti reflux mechanism in the lower portion of the esophagus. Reflux causes inflammation and symptoms (heartburn, coughing, asthma). If the reflux damages the nerves, the reflux does not produce symptoms. This is reflux without heartburn.

Symptoms

By definition, reflux without heartburn does not cause symptoms. The absence of symptoms masks the reflux. In rare cases the following symptoms may indicate reflux: discomfort in the upper abdomen, gastric fullness, early satiety. Women frequently forget a history of heartburn during pregnancy.

Diagnosis and tests

We recommend gastroscopy for the assessment of inflammation of the esophagus. In addition the gastroscopy excludes a premalignant Barrett’s esophagus (cancer risk). 70% of esophageal cancers develop without a previous history of reflux symptoms (heartburn). The tumors are assessed at an advanced stage due to swallowing difficulties (dysphagia). The consequences are: impaired life quality, reduced life expectancy, pain, weight loss; side effects of large therapies (chemotherapies, major surgery). For women and men, premalignant Barrett’s esophagus peaks at the age of 40. Therefore we recommend gastroscopy for the exclusion of reflux without heartburn in females and males at 40 years of age, persons with a family history positive for cancer. When gastroscopy shows evidence for asymptomatic reflux we recommend esophageal manometry and esophageal reflux monitoring.
Typical endoscopic image (gastroscopy) obtained in a person without heartburn. Yellow arrow marks a nodule indicative for tissue changes and inflammation. We always perform biopsies of these nodules to exclude Barrett’s esophagus, dysplasia and cancer.

**Treatment**

Reflux without heartburn requires treatment if gastroscopy assesses the premalignant Barrett’s esophagus (±dysplasia). In the absence of Barrett’s esophagus we recommend follow up endoscopy in 5 years. Barrett’s esophagus is removed by radiofrequency ablation (±endoscopic mucosal resection; EMR).

**Self care**

Self care for reflux without heartburn means to undergo gastroscopy. This is the only test to exclude premalignant Barrett’s esophagus (cancer risk).

**Complication**

The complication of reflux without heartburn is esophageal cancer. Esophageal cancer develops from Barrett’s esophagus.

**Prevention**

Prevention of reflux without heartburn includes life style modification and change of the eating behavior (see heartburn: food and beverages). Esophageal cancer is prevented by early diagnosis of Barrett’s esophagus and elimination of Barrett’s esophagus by Radiofrequency ablation (=comparable to the removal of polyp in the colon).

**Self test**

There exists no self test for reflux without heartburn.

**Expert opinion**
Sebastian Schoppmann (Surgeon, Vienna). The majority of cancers develop without a prior history of heartburn. This is why we recommend screening for Barrett’s. If Barrett’s is assessed, we can remove it by HALO ablation. It is the same as with colon polyps. Furthermore colon polyps and Barrett’s have the same cancer risk (0.5% per year). So why wait. Let us screen and eliminate cancer risk. This is what we owe to our patients: fair care to save lives.

Martin Riegler (Surgeon, Vienna). Patients frequently ask me: why should I have a cancer risk without heartburn? The majority of patients with esophageal cancer never had heartburn. Suddenly they developed difficulties at swallowing. Then cancer was diagnosed. Reflux destroys the nerves. There is no heartburn. So patients do not feel their cancer risk. Therefore we offer screening endoscopy to assess Barrett’s esophagus. If it is found we ablate it. This is the only way to prevent cancer development.

**Literature**