

## Gastric reflux

Gastric acid is retained inside the stomach and prevented from refluxing into the throat by both the upper and lower oesophageal sphincters. The backflow of gastric content from the stomach into the oesophagus is known as gastroesophageal reflux disease (GERD). If the backflow is up to the oesophagus and subsequently the throat and larynx, it is known as laryngopharyngeal reflux (LPR).

LPR and GERD present in different symptoms. LPR has a high incidence of hoarseness, throat discomfort, “lumpy” feeling in throat and swallowing discomfort, but only less than 20% LPR patients having heartburn or oesophagitis. Most LPR symptoms happen at daytime, whilst those of GERD happen at night.

A high prevalence of LPR has been reported worldwide. Possible explanations for the rapid growth of GERD and LPR include obesity, stressful lifestyle, fast food culture and unbalanced diet.

Ambulatory 24-hour pH biprobe study is currently a standard criterion for the diagnosis of LPR. It estimates the presence of extraesophageal reflux and demonstrates the temporal correlation between the reflux symptoms and reflux events. Refluxed gastric acid and gastric enzymes above the upper oesophageal sphincter into the pharynx, larynx, and upper aerodigestive tract is considered as abnormal and may cause extraesophageal symptoms such as frequent throat clearing, chronic cough, vocal fold granuloma and laryngeal cancer. Other investigations include barium contrast swallow study, upper endoscopic assessment, oesophageal manometric study and oesophageal biopsy.