# Dr Howard Fan Gastro-oesophageal Reflux Disease (GORD)

#### Overview

GORD affects approximately 10–20% of the Western population, and can significantly impact on their quality of life. It results from dysfunction of the lower oesophageal sphincter, often associated with a hiatal hernia, leading to reflux of gastric contents into the oesophagus.

## Symptoms

#### Symptoms of GORD can be quite variable and range from minor to severe.

Common symptoms: Heartburn, regurgitation, dysphagia.

Atypical symptoms: Chronic cough, hoarseness, asthma-like symptoms, chest pain.

## Complications

Chronic reflux can lead to damage to the oesophagus mucosa as the stomach acid causes injury and inflammation to the oesophagus.

#### 1. Reflux Oesophagitis

Characterised by inflammation of the oesophageal mucosa due to prolonged acid exposure. Graded endoscopically using the Los Angeles (LA) classification:

- Grade A: One or more mucosal breaks ≤5 mm.
- Grade B: Mucosal breaks >5 mm, not bridging folds.
- Grade C: Mucosal breaks continuous between ≥2 mucosal folds but <75% of circumference.
- Grade D: Mucosal breaks involving ≥75% of circumference.

#### 2. Barrett's Oesophagus

Characterised by metaplasia of squamous epithelium into columnar epithelium, with presence of Goblet cells due to chronic inflammation. This associated with increased oesophageal adenocarcinoma risk. Barrett's disease can be measured by the Prague C & M classification measuring circumferential extent (C) and maximum extent (M) of columnarlined epithelium above the gastro-oesophageal junction. Surveillance is carried out using the Seattle biopsy protocol where we take four-quadrant biopsies at every 1–2 cm of Barrett's segment, plus any visible lesions.

## Management Options

#### Medical

Fortunately, the majority of GORD and its complications can be managed non-operatively with:

- · Lifestyle modification (weight loss, bed head elevation, or dietary changes).
- Proton Pump Inhibitors (PPIs) as the preferred first-line pharmacologic treatment.
- H2 blockers or antacids can be added on in select cases.

## Surgery

Surgery may be indicated in select patients with GORD who have hiatus hernias and are not responsive to medical therapy. In such cases, **laparoscopic fundoplication** can be offered. In this operation, we reduce the hiatus hernia and reconstruct the natural anti-reflux mechanisms by: restoring the intraabdominal oesophagus, tightening the crural opening of the diaphragm, suturing the phreno-oesophageal ligament, recreating the angle of His, and wrapping the stomach around to form a new lower oesophageal sphincter.

#### Summary

GORD is a common problem which can present with an array of different symptoms. Untreated GORD may cause problems such as reflux oesophagitis and Barrett's oesophagus. The majority of GORD can be managed with lifestyle modifications and PPIs, however, if symptoms persist, surgery can be considered.

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P: 1300 038 398 E: admin@drfan.com.au Dr Howard Fan is a general surgeon with an interest in minimally invasive gastrointestinal surgery.

Dr Howard Fan graduated from the University of New South Wales (UNSW) with a Bachelor of Medical Studies, Doctor of Medicine, and Masters of Health Management and subsequently worked with New South Wales Health before completing fellowship in general surgery to become a Fellow of the Royal Australasian College of Surgery (FRACS).



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