# How to Avoid Marginal Ulcers in RYGB and OAGB

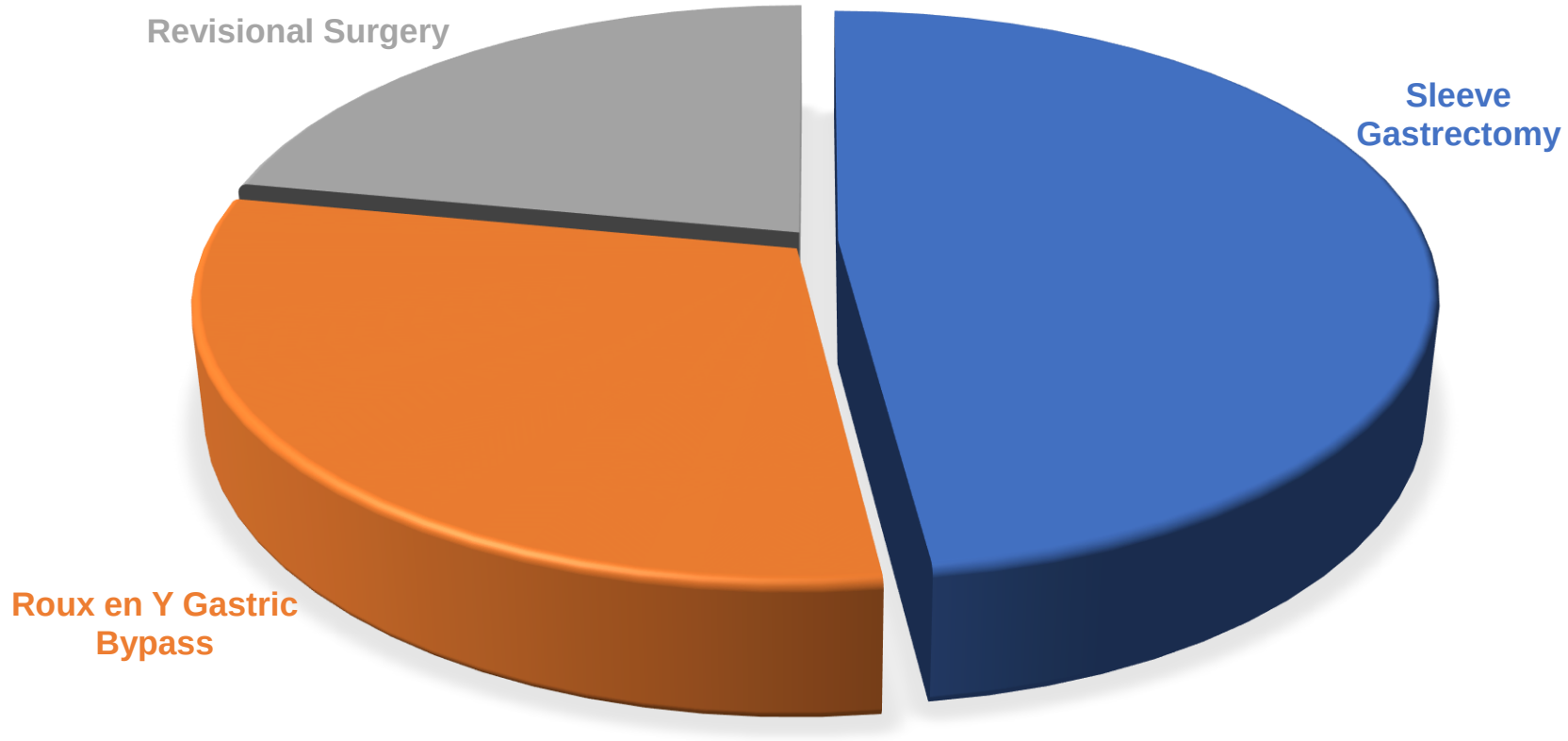
Hazem Al Momani
Consultant Bariatric Surgeon
Chair of Communication Committee IFSO & IFSO MENAC
Head of Department – Weight Management Unit
NMC Royal Hospital
Abu Dhabi, UAE

# Conflict of Interest Disclosure

In accordance with «EACCME criteria for the Accreditation of Live Educational Events»:

I have no potential conflict of interest to report

# Case mix


Revisional Surgery
Sleeve Gastrectomy
Roux en Y Gastric Bypass

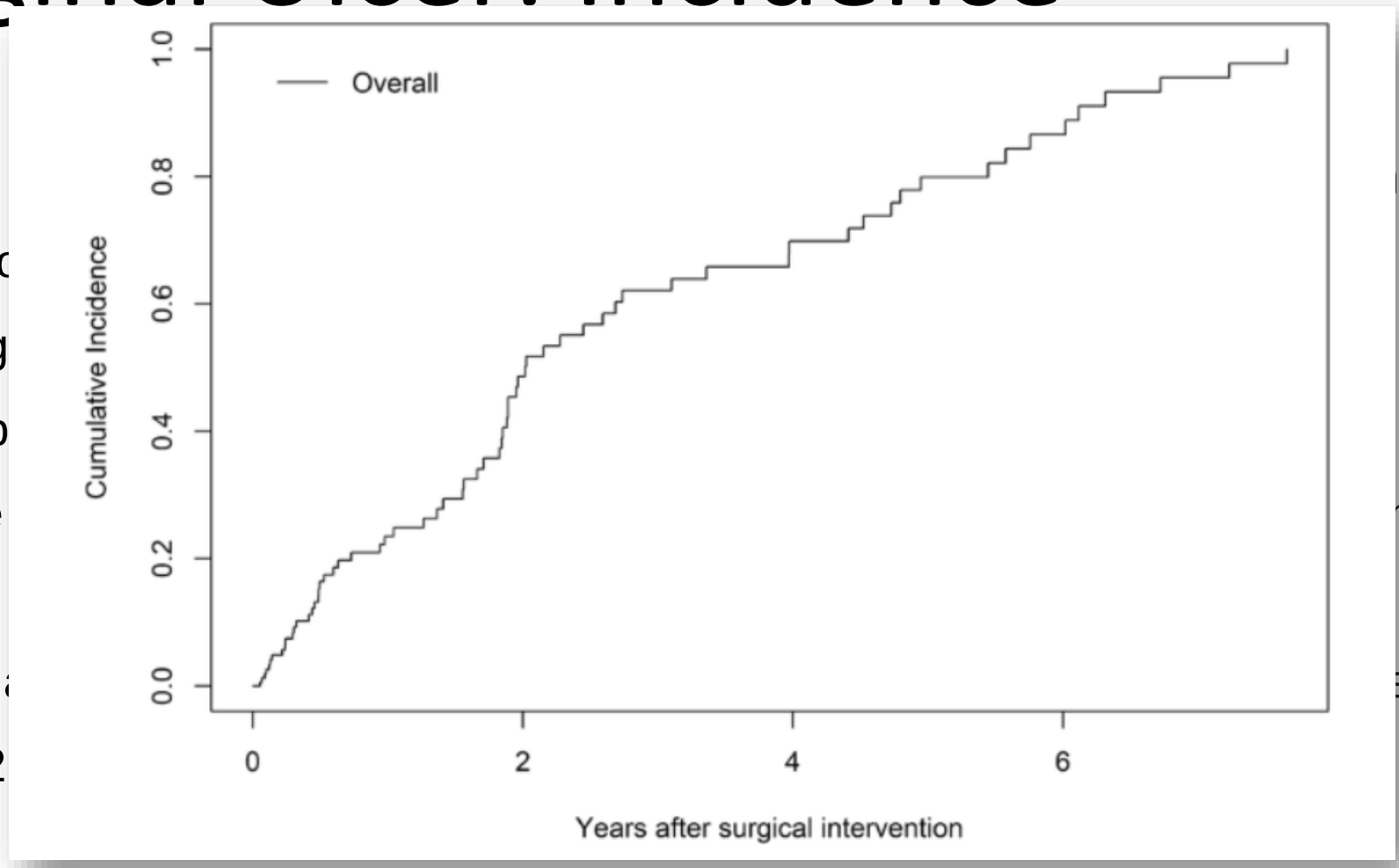
# Definition

"A peptic ulcer produced at the jejunal mucosa just distal to the gastro-jejunal anastomosis after partial gastrectomy for benign or malignant diseases, or after surgery for morbid obesity"

- Marginal ulceration is a complex problem with unclear etiology and lack of clear consensus on its prevention and management

# Marginal Ulcer: Incidence

- 4.6 % of al ulcers, co
- The rang of follow-up
- The time n and 6 years
- Several l ent within 12



# Clinical Presentation

- Upper abdominal pain (56.8 %)
- Nausea
- Vomiting
- Bleeding (Hematemesis, Melena)
- Perforation: around 1.4 % of the patients with marginal ulcers present with perforation
- Stricture
- 28% can have atypical symptoms

# Aetiology

**Anatomical & Surgery Related factors**

Gastro-gastric fistula

Tension on staple line

Pouch Size

Suture material

Anastomotic method

(Hand sawn, Linear stapler, Circular stapler)

**Patient related factors**

Helicobacter pylori

Diabetes

Smoking

NSAID

Alcohol Use

# Pouch Size

- A larger pouches contain a greater parietal cell mass that produces acid, resulting in increased acidity levels and a higher likelihood of developing ulcers
- The risk of MU doubles for every 5 cm3 increase in size
- For every additional centimetre above a 14.5 cm total staple line firing length (horizontal plus vertical firings), the relative risk of marginal ulcers increases by 14%

# Suture Material

- Higher incidence of MU with non-absorbable sutures
- Foreign body reaction against the suture material induces an inflammatory response and an increased risk for MU
- Studies have compared the occurrence of MU between non-absorbable and absorbable sutures, revealing a substantial decline in incidence from 2.6% to 1.3%, respectively

# Anastomotic method

- Several studies have reported that circular stapled anastomosis (CSA) resulted in higher rates of MU development when compared to linear stapled anastomosis (LSA) and hand sewn anastomosis (HSA)

# BP limb length

- Not relationship between BP limb length and MU

# Helicobacter pylori

- It is believed that the bacteria could potentially create a state of chronic inflammation accompanied by gastritis and metaplasia, ultimately resulting in the formation of MU
- Monoclonal stool antigen tests have a sensitivity and specificity of over 90%, making them the most suitable non-invasive diagnostic tool
- preoperative screening, and eradication of H. pylori before bariatric surgery may help minimize the incidence and development of subsequent H. pylori-associated ulcers

# Diabetes Mellitus

- For each unit rise in HbA1c above 6.0%, there was a 23% increase in the risk of developing MU
- Optimizing glycaemic control before and after surgery is crucial for reducing the postoperative risk of MU

# Smoking

- Smoking was a significant predictor for the development of MU, with a 4.6-fold higher risk
- Individuals who are considering bariatric surgery should refrain from smoking for at least six weeks preoperatively

# NSAID

- NSAIDs impact the GI mucosa primarily by inhibiting cyclooxygenase, reducing prostaglandins, and decreasing blood flow
- short-term use (< 30 days) and low doses of NSAID and Aspirin may not increase the risk of MU; whereas higher doses and chronic use do

# Alcohol use

- A recent meta-analysis concluded that alcohol use was not linked to a higher risk of MU
- However, consuming more than one alcoholic beverage per day and presenting with a perforated MU increased the risk of ICU admission following RYGB
- Given the potential adverse effects of alcohol on the GI mucosa and its detrimental effects on the health of the patients who underwent bariatric surgery, it is highly advisable to abstain from alcohol consumption following RYGB surgery

# Thank You!