

Gastric Outlet Obstruction (GOO)

A clinical syndrome that is defined as narrowing in the region of gastroduodenum resulting in delayed passage of gastric contents from the stomach to the duodenum.

Etiologies of GOO

Malignant (most common)

- Pancreatic cancer
- Gastric cancer
- Duodenal cancer
- Gastric carcinoid
- Small intestine carcinoid
- Pancreatic neuroendocrine tumors
- Lymphoma
- Sarcomas
- GI stromal tumors
- Ampulla of Vater cancer
- Metastatic cancer
- Cholangiocarcinoma
- Gallbladder cancer

Benign

- Peptic ulcer disease (PUD)
- NSAID induced strictures
- Helicobacter Pylori infection
- Caustic ingestion
- Chronic pancreatitis
- Pancreatic pseudocyst
- Walled-off necrosis
- GI polyps
- Lipomas
- Radiation-induced & surgical strictures
- Foreign bodies
- Eosinophilic enteritis
- Tuberculosis



Management of Benign GOO

In patients with benign GOO

- Insufficient evidence to recommend endoscopic interventions over surgical management
- Treatment should be based on length of the stricture and comorbid conditions, in addition to local expertise

Surgical management

- Long stricture >3 cm
- Caustic ingestion
- Chronic pancreatitis

Endoscopic balloon dilation

- Short stricture <3 cm
- Helicobacter Pylori infection
- NSAIDs use
- Active smoking

Treatment Options

Endoscopic interventions

- Self-expandable metal stent (SEMS), can be covered vs uncovered
- Endoscopic balloon dilation (EBD)

Surgical management

- Surgical gastrojejunostomy (GJ)

Management of Incurable Malignant GOO

In patients with incurable malignant GOO undergoing palliative interventions

- Endoscopic SEMS placement or surgical GJ are equally effective
- Treatment should be based on patient characteristics, preferences and local expertise



Endoscopic SEMS placement

- Life expectancy <6 months
- Shorter length of stay
- Shorter time to resumption of oral intake



Surgical GJ

- Life expectancy >6 months
- Good performance status
- Less reintervention rates

Considerations/Limitations

When comparing endoscopic & surgical interventions

- No significant difference in survival, in-hospital mortality or adverse events (AE) between endoscopic and surgical interventions
- No sufficient data to evaluate for patients' satisfaction or cost effectiveness
- The use of lumen-opposing metal stents (LAMS) with EUS-guided gastroenterostomy is considered off-label use at this time



In patients with incurable malignant GOO undergoing palliative endoscopic interventions

- Insufficient data to recommend covered over uncovered SEMS
- Treatment should be based on patient characteristics, preferences and regional stent availability



Covered SEMS

- Higher rates of migration
- Higher rates of perforation



Uncovered SEMS

- Higher rates of occlusion

Considerations/Limitations

When comparing covered & uncovered SEMS

- The use of covered SEMS for malignant GOO is not a standard of practice in the US and most studies were from East Asia
- No significant difference in technical and clinical success rates
- No significant difference in bleeding or adverse event rates
- No sufficient data to evaluate for severity of AE or cost effectiveness
- The use of LAMS for short peptic strictures is considered off-label use at this time