

Endoscopic Stent Placement

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Esophageal stents

- Self-expandable metal – partially covered
- Self-expandable metal – fully covered
- Self-expandable plastic

Esophageal stents: Indications

- Palliation of dysphagia
- Palliation of malignant esophageal fistulae
- ? Bridge to surgery

Esophageal stents: Timing of Placement

- As an adjunct to chemoradiation - ?
Placement of removable stent as a bridge to palliation and avoid long-term stent complications
- Concomitant stent and chemoradiation
NOT associated with poor outcome
- As a bridge to surgery – while receiving chemoradiation

Esophageal stents: complications

- Migration
- Tracheoesophageal fistula
- Erosion into blood vessels – bleeding
- Obstruction from granulation tissue
- Food impaction

Esophageal stents: plastic vs. metal

- Equal palliation
- Migration rate higher with plastic
- Plastic easily removable if designed for temporary use

Conio M, Am J Gastroenterol. 2007 Dec;102(12):2667-77.

Stent placement: Location

- Cervical

- Smaller diameter preferable
- Foreign body sensation

- GEJ

- Larger diameter preferable
- Higher migration rate than other locations
- Gastroesophageal reflux, aspiration
- ? Anti-reflux stent

Duodenal stents

- Indication – palliation of malignant gastric outlet obstruction
- Outcome for palliation appears to be better than palliative gastric bypass in poor operative candidates
- Stent placement tends to occur late in relation to disease course and patients have limited

Duodenal stents

- Benefits of newer duodenal stents
 - Flexibility
 - Rounded ends
- Need for metal biliary stent placement prior to duodenal stent placement
 - Usually biliary stent already present -
 - If not, evidence of ductal dilation and abnormal liver enzymes portends later obstruction with pancreatic head cancer

Colonic stents: Malignant Indications

- Palliation of malignant colorectal obstruction
- Pre-operative placement in left sided disease for decompression and one-stage surgery

Colonic stents: Benign Indications

- Bridge to surgery in obstruction
- Use for post-operative complications: fistula or stricture
 - High migration rates with covered stents
 - Case reports only
 - Uncovered stents – lack of removability

Colonic stents: Right Sided Disease

- Success rate and outcomes appear to be comparable to left sided placement

Repici A et al. *Gastrointest Endosc.* 2007 Nov;66(5):940-4.

Colonic stents: Complications

- Delayed perforation – closure of Dutch in stent study – palliation

van Hooft JE et al., *Endoscopy*. 2008 Mar;40(3):184-91.

- Migration – uncommon with newer stents and proper patient selection