Background  Patients with unresectable cancers of the upper gastrointestinal tract often suffer severe symptoms due to pain, nausea and vomiting, weight loss, cachexia, and poor food tolerance. This can be related to gastric and duodenal cancers causing intrinsic obstruction of the intestinal lumen or pancreatic and biliary cancers causing extrinsic biliary compression. Management options vary depending on the site of obstruction, the patient's functional status, the patient-defined goals of care, and estimated prognosis. Fast Fact #45 discussed medical management options. This Fact Fact reviews interventional approaches for upper GI obstructions, especially when further radiation, chemotherapy, medical management, or curative surgical options are no longer helpful. Listed below are treatment options for managing different sites of obstruction (listed from least invasive to most invasive). Management decisions for these problems are complex, requiring a multi-disciplinary approach (involving surgery, gastroenterology, medical and radiation oncology, radiology, and palliative care) to achieve the best possible outcome with minimum morbidity.

Esophageal obstruction
1) External beam radiation therapy (successful in 40% of patients).
2) Endoscopic laser therapy (can be repeated every 4-6 weeks).
3) Endoscopic/fluoroscopic stenting (different stent materials are available for different situations).

Gastric or Duodenal obstruction
1) Nasogastric tube decompression (poor long-term solution due to patient discomfort).
2) Venting gastrostomy tube, which allows for drainage of intestinal contents (can be placed endoscopically, laparoscopically, or with open surgery).
3) Janeway gastrostomy (surgically created gastrocutaneous fistula).
4) Endoscopically/fluoroscopically placed stent across the site of obstruction (e.g. pylorus).
5) Laparoscopic gastrojejunostomy.
6) Open gastrojejunostomy.

If unable to restore continuity of the gastrointestinal tract with a surgical procedure to bypass the obstruction, a combination of a gastrostomy tube with a separate jejunostomy tube can be used. This can provide enteral nutrition to the small intestine while venting the stomach. Patients can enjoy the pleasure of eating, even if the food is drained through the G-tube.

Pancreaticobiliary obstructions
1) Stent placement (plastic or metal) across obstruction through an endoscopic procedure (ERCP).
2) Stent/drain placement across obstruction by a radiologic procedure (transhepatic).
3) Laparoscopic cholecystojejunostomy (after gallstone absence is confirmed).
4) Open choledochojejunostomy, cholecystojejunostomy or hepaticojejunostomy.

Adjuvant medications may augment the efficacy of these interventions.
• Proton pump inhibitor to reduce gastric secretions.
• Sucralfate (Carafate) slurry, 1 gram q6 hours, for patients with ulcerated esophageal or gastric lesions.
• Metoclopramide (Reglan) 10 mg tid to qid, as a prokinetic drug.
• Octreotide (Sandostatin) 50-100 micrograms q6-8 h for high volume output conditions.
• Dexamethasone 4-8 mg per day.

References


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