

Case Report

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## Malignant Gastric Outlet Obstruction

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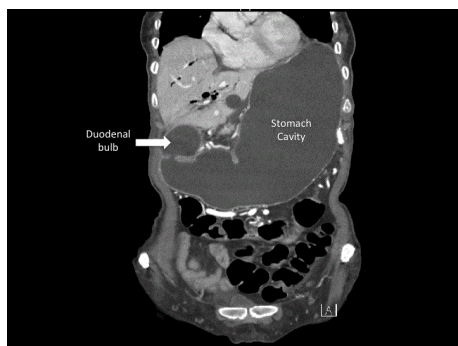
### Abstract

Currently, malignancy is the most common cause of gastric outlet obstruction (GOO) accounting for 50-80% of the cases. Additionally, GOO occurs in 15-25% of patients with pancreatic cancer. This case report is an interesting image of an enormously dilated stomach in a pancreatic cancer patient due to duodenal obstruction secondary to pancreatic cancer.

**Keywords:** Gastric outlet obstruction; Pancreatic cancer; Malignant

### Case Information

A 73-year-old female with metastatic pancreatic adenocarcinoma with biliary stent placement, presented with bilious emesis and fever for one day but without abdominal pain. She had abdominal distention, sluggish bowel sounds and mild epigastric tenderness. Computed tomography (CT) scan showed dilatation of the esophagus, stomach (enormous) and down to the third portion of the duodenum secondary to mass-like thickening of the duodenum related to involvement by adjacent tumor (Figure 1). A nasogastric tube placement yielded 3.5 liters output immediately and drained more than 5 liters within 24 hours. While deploying a duodenal stent, the patient became bradycardic and later asystolic and chest compressions were started. As the abdomen was tense and tympanitic, needle decompression with an angiocatheter revealed air escape and return of spontaneous circulation.



**Figure 1:** CT scan of abdomen (coronal view) shows enormously dilated stomach in addition to dilatation of the duodenal bulb secondary to mass-like thickening of the duodenum related to involvement by adjacent tumor.

Subsequent CT scan demonstrated a large proximal gastric body perforation. Initial management included intravenous fluid resuscitation, broad-spectrum antibiotics, and mechanical ventilatory

support. Laparotomy revealed three tears on the anterior stomach surface (the largest tear measuring 8 cm) and were all repaired. After her discharge, the patient was started on FOLFOX6 chemotherapy regimen. However, due to her poor prognosis and performance status she was enrolled in hospice and expired six months after her presentation.

### Discussion

Gastric outlet obstruction (GOO) is a misnomer expression as numerous cases include duodenal or extraluminal disease, rather than an isolated gastric disease. At current time, malignancy is responsible for 50-80% of the cases [1-3]. GOO occurs in 15-25% of patients with pancreatic cancer [4]. Other infrequent etiologies of malignant GOO include gastric lymphoma, gastric carcinoid [5], duodenal and ampullary neoplasms, and cholangiocarcinoma (local or advanced) [6].

Gastrojejunostomy has been the traditional treatment of choice to palliate malignant gastric and duodenal obstruction but with high morbidity and mortality rates [7]. Malignant GOO is the principal indication for gastroduodenal stenting to restore the luminal patency. In a systematic review and meta-analysis of randomized and non-randomized trials, duodenal endoscopic stenting seemed to be safe and showed better short-term outcomes as compared to operative surgical gastrojejunostomy and therefore should be the preferred method in patients with short-life expectancy [8]. However, gastrojejunostomy have better long-term outcomes (fewer late complications and long patency) and should perhaps be preferred in patients with long prognosis [9].

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