

Diagnostic Snapshot



Management of Gastric Outlet Obstruction in a Patient With Gastric Cancer

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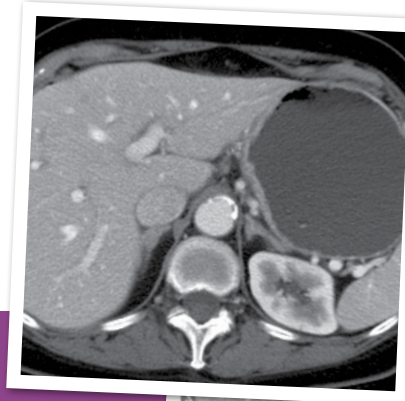
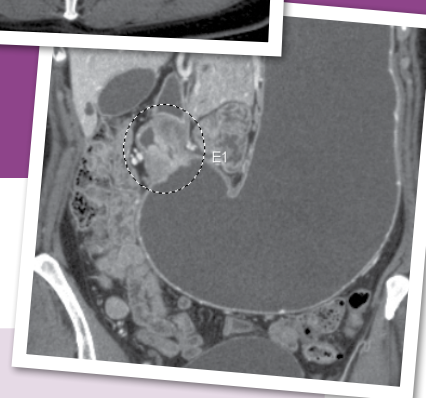


Figure 2



Abstract

This article describes the evaluation of a patient with gastric cancer that confirms gastric outlet obstruction, followed by a discussion on management.

HISTORY

Ms. H is a 72-year-old female with a personal history of CVA and PVD who presented with nausea, decreased appetite, and weight loss. She underwent an endoscopy that revealed a large, infiltrative, partially circumferential mass in the gastric curvature and prepyloric region of the stomach. Biopsy of the gastric mass revealed adenocarcinoma. Exploratory laparoscopy with peritoneal washings revealed no evidence of metastatic cancer. Ms. H was referred to the medical oncology team to discuss induction chemotherapy.

CHIEF COMPLAINT

Ms. H presents to the medical oncology clinic with postprandial nausea and intermittent vomiting. She reports progressive abdominal distention. She is currently on a liquid diet since she experiences significant nausea with solid and soft foods. She reports an approximate 8-lb weight loss in the past month and denies any abdominal pain. Ms. H admits that her bowel habits have changed in the past 2 weeks and has been constipated for the past several days. Her energy levels have diminished, but she continues to complete ADLs on her own.

EXAM AND DIAGNOSTIC STUDIES

Upon physical exam, Ms. H is well developed and in no acute distress. Her vital signs are normal. Lungs are clear to auscultation bilaterally. Cardiac exam is unremarkable. Abdominal exam reveals mild abdominal distention with tenderness to palpation in the epigastric region. Normoactive bowel sounds are present with no hepatosplenomegaly. There is no palpable lymphadenopathy. There is no evidence of edema or rash. She is alert and oriented with no focal deficits. Laboratory analysis reveals no elevated tumor marker (carcinoembryonic antigen). Her complete blood count, chemistry profile, and liver enzymes were all within normal limits.

CT of the abdomen and pelvis (Figures 1 and 2) shows the primary gastric mass in the distal gastric body/antral extending into the pyloric region. The mass causes luminal narrowing with resulting moderate to severe upstream gastric distention. This is consistent with gastric outlet obstruction. The gastric distention compresses the pancreatic body and tail posteriorly. There is no definite lymphadenopathy in the chest, abdominal, or pelvis. There is no definitive evidence of metastatic disease.

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WHAT IS THE CORRECT MANAGEMENT FOR GASTRIC OUTLET OBSTRUCTION FOR GASTRIC CANCER?

- A Surgical bypass with gastrojejunostomy
- B Duodenal stent placement
- C Initiate chemotherapy

SEE PAGE 112 FOR ANSWER



WHAT IS THE CORRECT MANAGEMENT FOR GASTRIC OUTLET OBSTRUCTION FOR GASTRIC CANCER?

- A Surgical bypass with gastrojejunostomy
- B Duodenal stent placement (correct answer)**
- C Initiate chemotherapy

A Surgical Bypass With Gastrojejunostomy.

While this intervention is known to have fewer complications, the time to symptom relief is longer (Jeurnink et al., 2010). Additionally, Ms. H has localized gastric cancer and plans to have a subtotal gastrectomy as the curative intent. The surgical bypass can delay her initiation of neoadjuvant chemotherapy due to a longer hospital stay and recovery.

B Duodenal Stent Placement. Duodenal stent placement is the ideal intervention for gastric outlet obstruction. This has become an increasingly optimal choice since the early 1990s (Kim et al., 2007). The aim is palliation of symptoms of obstruction and to allow oral intake. The self-expandable stent is placed endoscopically. The technical success rates of duodenal stenting for malignant gastric outlet obstruction are greater than 97.5% (van Halsema, Rauws, Fockens, & van Hooft, 2015). Approximately 60% to 80% of patients are able to eat soft foods shortly after stent placement (Tang, 2013). Additionally, stent placement requires a shorter hospital stay and allows cancer therapy to be started faster. The most common problem with duodenal stent placement is restenosis due to tumor ingrowth. The risk of perforation is less than 2%, and the risk of bleeding is approximately 4% (van Halsema et al., 2015). Tumor ingrowth is managed with the placement of additional covered stents through the original stent (Kim et al., 2007).

C Initiate Chemotherapy. Preoperative chemotherapy is known to be advantageous (improved progression-free survival and overall survival) over surgery alone for resectable gastric cancer (Cunningham et al., 2006). However, Ms. H has significant gastric outlet obstruction with worsening symptoms. Chemotherapy will not alleviate the symptoms fast enough, and Ms. H will have problems with tolerating chemotherapy due to her symptoms from the obstruction.

MANAGEMENT

Ms. H was admitted for nasogastric tube decompression for 2 days. She had an endoscopy that revealed a large amount of retained gastric contents, which were suctioned out. An uncovered metal duodenal stent was placed, with the proximal end in the antrum and the distal end in the second portion of the duodenum. Contrast was then injected through the stent to confirm patency.

Ms. H's symptoms improved after duodenal stent placement. She was able to eat soft foods and her nausea with vomiting resolved. She began induction chemotherapy with infusional fluorouracil and oxaliplatin. ●

Disclosure

The author has no conflicts of interest to disclose.

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