An Unusual Cause of Gastric Outlet Obstruction

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Introduction

Gastric outlet obstruction (GOO) is often an initial sign of upper gastrointestinal neoplasms causing mechanical obstruction that is characterized by abdominal pain and vomiting. Neoplasms that most often cause GOO include gastric, pancreatic, and biliary tract malignancies. We report an 82-year-old female who presented with nausea, vomiting, and right upper quadrant pain, without urinary symptoms, who was found to have a GOO due to high grade urothelial carcinoma.

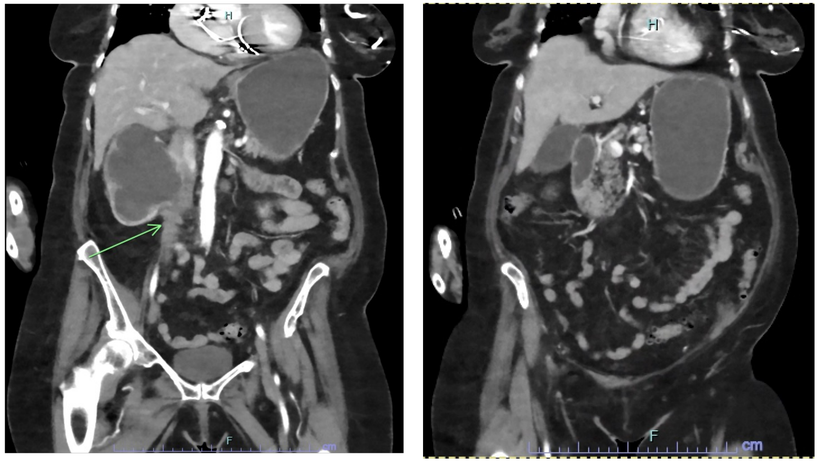

FIGURE 1

CT findings demonstrating increased distention of the stomach secondary to the narrowing of the duodenum secondary to extension of the neoplasm from the right proximal ureter to the duodenum. As well as severe right hydronephrosis with concern for urothelial cell neoplasm involving the right proximal ureter

Clinical Vignette

An 82-year-old female with no gastrointestinal or urinary history presented to the emergency room with nausea, vomiting and right upper quadrant abdominal pain with no urinary or systemic symptoms. A computer tomography (CT) showed severe right hydronephrosis related to a 3.5 x 2.2 cm ill-defined soft tissue density at the ureteropelvic junction, which extended to the lower pole calyx of the right kidney. The patient left against medical advice.

The patient returned five days later due to increasing symptoms of nausea, vomiting, and right upper quadrant pain. A nasogastric tube (NG) was placed for decompression. A repeat CT showed increased distention of the stomach secondary to encasement of the duodenum from the neoplasm. (Figure 1) Urinalysis was negative for blood, casts, transitional epithelium, and squamous epithelium. A CT urogram showed severe right hydronephrosis secondary to an irregular mass that appeared to infiltrate into the surrounding fat and abutted the duodenum, inferior vena cava and right psoas muscle. An upper endoscopy (EGD) to further evaluate for gastric origin did not find mucosal disease, but it did show a severe extrinsic deformity in the third portion of the duodenum (Figure 2). The patient then underwent a cystoscopy with right retrograde pyelogram and right ureteral stent placement. Unfortunately, her cytology was positive for high grade urothelial carcinoma. The patient had a percutaneous endoscopic gastrostomy (PEG) tube placed for palliative decompression so her NG tube could be removed. She was considered for a gastrojejunal tube to bypass the duodenal obstruction so oral feeding would be possible. Ultimately the patient felt too weak to proceed with any additional procedures and elected to go home with hospice care.

Discussion

GOO most often can be caused by infiltrative disease, peptic ulcer disease, gastric polyps, and malignancy. Upper tract urothelial carcinoma represents 5% of urothelial cancers with few cases causing GOO reported. While this patient did not present with hematuria or flank pain, common symptoms of urothelial carcinoma, this case highlights that patients presenting with intractable vomiting or abdominal pain should undergo imaging.

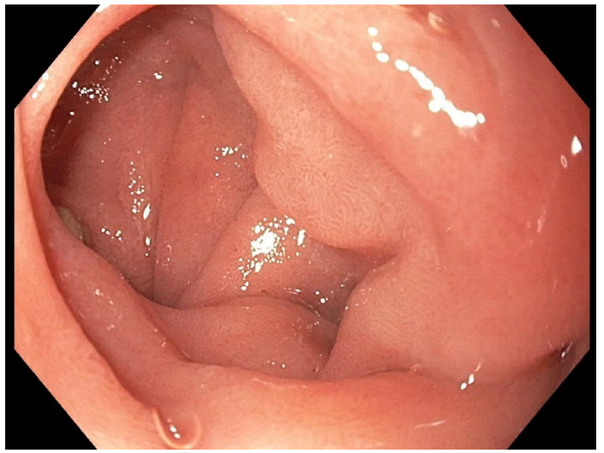

FIGURE 2

EGD findings showing a severe extrinsic compression deformity of the duodenum

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