

# A bridge over troubled anastomosis: Lumen opposing metal stent for dilation of post-Whipple stricture

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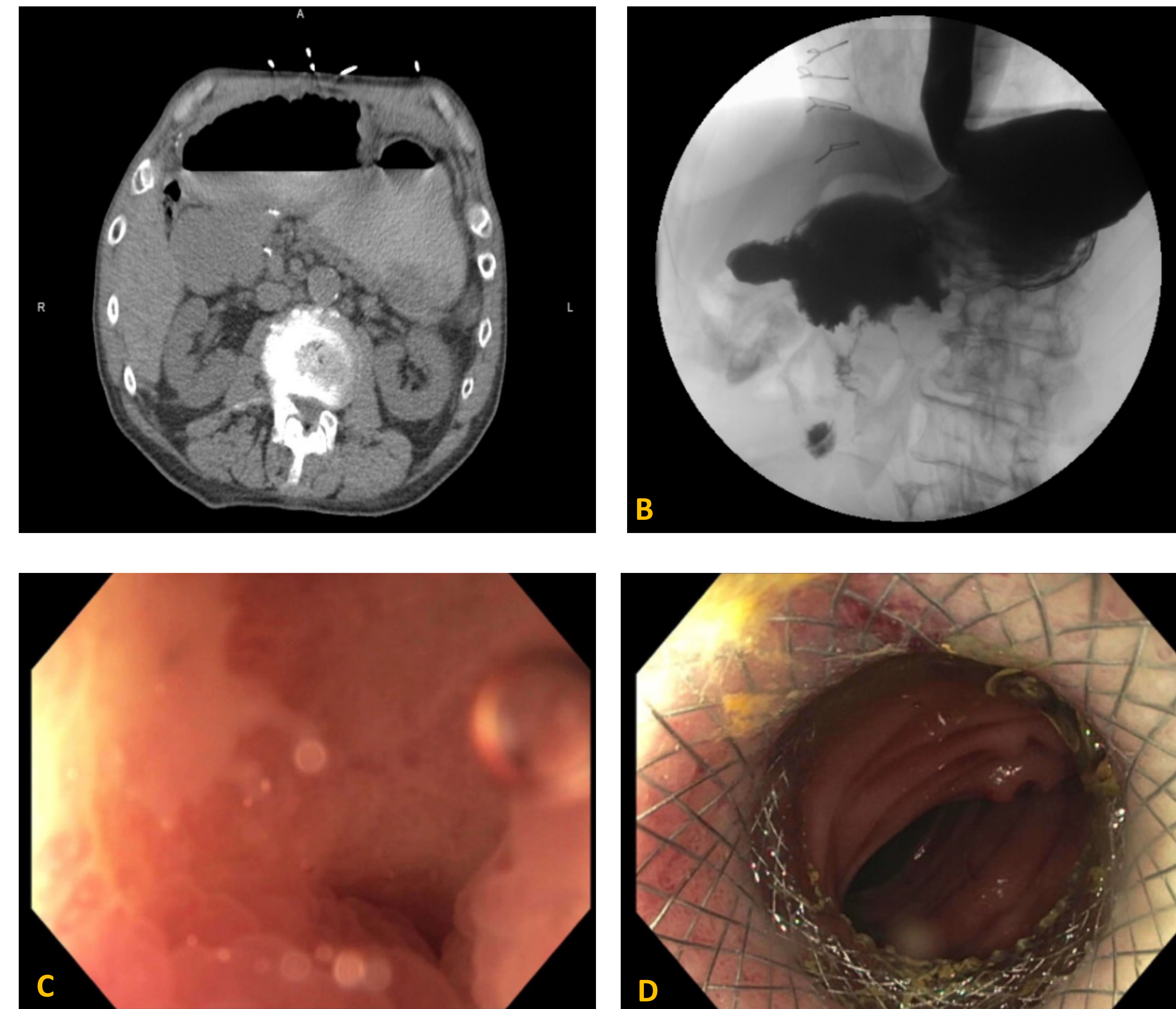
## Introduction

- Whipple procedure or pancreaticoduodenectomy is a resection surgery for pancreatic head cancer
- Whipple procedure has many known complications including delayed gastric emptying, pancreatic fistula, hemorrhage, and biliary leakage
- We present a case of gastrojejunal anastomosis obstruction in a patient who had Whipple procedure for pancreatic adenocarcinoma

## Case report

- 71 year old male with a past medical history of pancreatic adenocarcinoma one year post-Whipple procedure
- Presented with nausea, non-bloody emesis, and poor oral intake
- CT of abdomen and pelvis demonstrated dilation of stomach and soft tissue thickening at the level of gastrojejunostomy site (Figure A)
- NG tube was placed with significant output with intermittent blood
- Upper endoscopy revealed healthy-appearing mucosa but the scope was not able to be advanced due to an obstruction
- Subsequently, patient underwent upper GI series which revealed delayed passage of contrast through the gastrojejunostomy anastomosis or gastric outlet obstruction (Figure B)
- Patient underwent repeat upper endoscopy twice. First with dilation of the severe stenotic area, and second with deployment of lumen-opposing metal stent (LAMS) across the gastrojejunostomy stricture (and with over-the-scope stitching device). The scope was then easily traversed from the stomach to the jejunal limb. (Figure C & D)
- Patient was able to slowly advance his diet and discharged with a plan for stent removal in 6 months.

## Figures



## Discussion

- Pancreaticoduodenectomy or Whipple procedure is a major surgery performed to resect the cancer at the head of the pancreas
- Two types of pancreaticoduodenectomy: conventional and pylorus-preserving pancreaticoduodenectomy
- Known complications include wound infection, pancreatic leak and fistula, pancreaticojejunal anastomotic stricture, cholangitis, biliary fistula, delayed gastric emptying, and hemorrhage
- Traditionally, the obstruction has been managed surgically or with balloon dilation
- However, LAMS has shown its high utility in clinical outcomes and complication rates that are comparable to traditional methods
- Due to complex anatomy in post-Whipple procedure, it is important to consider the stenosis or stricture of gastrojejunal anastomosis in patients who present with symptoms of gastrointestinal obstruction
- Lastly, LAMS can provide a less invasive and effective management option to treat these obstructive complications