Icahn School of Medicine at Mount Sinai



Light At the End of the Tunnel: Pipeline to the Jejunum

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CASE PRESENTATION

A 56 year-old woman with hypertension,

obstructive lung disease, and a prior ischemic stroke presented to the hospital for 4 days of postprandial emesis, abdominal distention, epigastric pain, and constipation. She previously underwent appendectomy and hysterectomy, and had no prior endoscopic studies. CT was performed and demonstrated mural thickening of the distal duodenum and partial occlusion of the small bowel, regional lymphadenopathy, and a large left adrenal mass. EGD showed an intrinsic severe stenosis in the distal duodenum. biopsies were taken, which demonstrated primitive neuroectodermal tumor. Because of the presence of mesenteric adhesion and extensive stenosis, it was decided to correct the stricture endoscopically. Using a pediatric colonoscope and fluoroscopic guidance, 3 stents were placed sequentially and telescoping each other from the proximal jejunum to the distal duodenum: a fully covered 20mm x 120mm esophageal stent, a partially covered 18mm x 97mm esophageal stent, and a fully covered 20mm x 60mm esophageal stent (Figure 1). There were no immediate complications with the imaging procedure and repeat demonstrated luminal patency without any perforations.

BACKGROUND

Small intestinal strictures that are distal to the duodenum, particularly the jejunum, are uniquely complicated to manage. Adult endoscopes are often too short or too rigid to reach this region of the small bowel. Furthermore, duodenal stents are not flexible enough and are uncovered. In this case, we were able to place several esophageal stents in the proximal jejunum using a pediatric colonoscope that could not be placed previously.

DISCUSSION

This case demonstrates the feasibility of utilizing multiple esophageal stents to help relieve a distal intestinal obstruction that was not feasible in the past. The covered esophageal stents are extremely useful when there is discontinuity in the lumen of the small bowel to keep the natural flow of food and help prevent surgical interventions.





Figure 1: (A) Coronal CT image of a large abdominal mass involving loops of bowel and jejunum. (B) Abdominal x-ray showing interval placement of stents from the distal duodenum to the proximal jejunum