Laparoscopic Graham Patch for Pediatric Duodenal Perforation

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Introduction

Peptic ulcer disease causing perforation is extremely rare in children, and of those, primarily affects teenagers. Other less common causes of pediatric peptic ulcer disease include NSAID use, Crohn's disease, CMV, gastrinoma, and hyperparathyroidism. Perforated peptic ulcer is an uncommon pediatric surgical problem, and imaging may not be diagnostic as in the case presented here.

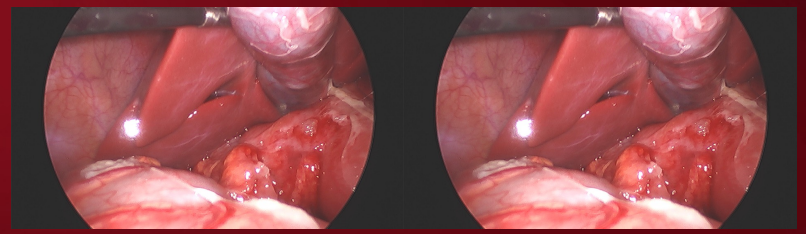
Procedure

He was emergently transferred, found to be peritonitic, and taken to the operating room for diagnostic laparoscopy, which revealed yellow-tinged ascites, and omentum densely adherent to the duodenum. This was peeled back revealing a small 5 mm anterior duodenal ulcer, and a laparoscopic Graham patch repair was performed. This was performed with two 2-0 silk intracorporeal sutures.

Case

Here, we describe the case of a 6-year-old that had two weeks of intermittent abdominal pain, and three days of nausea and vomiting. He underwent workup for appendicitis at another facility and was found to have a leukocytosis of 17, elevated anion gap metabolic acidosis, nondiagnostic ultrasound, and a CT revealing moderate volume pneumoperitoneum and pelvic free fluid without a distinct cause.

Intraoperative Findings



Discussion

Postoperatively, the child had positive fecal antigen for *H.* pylori. He was treated with triple therapy, underwent subsequent testing to confirm eradication and will undergo EGD to rule out additional pathology. The child's family received counselling to get tested, throw away toothbrushes, and to be careful with shared household items like dishes and silverware. *H. pylori* is an important entity to recognize as a cause of pediatric peptic ulcer disease, largely due to its risk of recurrence. Thus, clinicians need to maintain a high index of suspicion when evaluating children with free air and a surgical abdomen in the setting of long-standing abdominal pain.

References

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