9-year-old male with Intussusception Secondary to Large Colonic Polyp, Requiring Bowel Resection, as a Cause of Abdominal Pain

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INTRODUCTION

Although intussusception commonly presents in young children between the ages of 6 months to 36 months, making the correct diagnosis in a child older than 5 years of age can be challenging. This case report presents a 9-year-old male with acute, diffuse abdominal pain. He was found to have colonic-colonic intussusception secondary to a large colonic polyp that was addressed via laparoscopic-assisted colon resection with primary anastomosis.

DIFFERENTIAL DIAGNOSIS

Abdominal pain frequently causes distress for families and children; however, most cases are benign. In a study of almost one thousand children ages 4 to 18 years old, constipation accounted for 48% of these episodes. The etiology is usually self-limited and due to constipation, gastroenteritis, or viral syndrome. These etiologies may be identified in an outpatient setting with a thorough history and physical exam. When the pain is not alleviated or if the history and physical exam are particularly concerning, other causes must be diligently evaluated and may require imaging to further delineate the diagnosis. These include inflammatory bowel disease, appendicitis, intussusception, perforated ulcer, hemolytic uremic syndrome, malrotation, diabetic ketoacidosis, intestinal obstruction, incarcerated or necrotizing bowel, and pregnancy.

CASE

J.P. is a healthy 9-year-old male who presented to the emergency room (ER) for acute, intermittent abdominal pain for 2 weeks. Symptoms included bloody stools and anorexia, which heightened awareness for a serious etiology. He had initially been diagnosed with infectious colitis. His symptoms had worsened as an outpatient, causing the family to seek emergent care. In the ER, intussusception was noted on ultrasound, initially thought to involve the small bowel. Given the amount of bowel potentially involved and patient's symptoms, there was concern for possible lead point resulting in obstruction. An upper gastrointestinal study with small bowel follow through was recommended. Unfortunately, he was unable to tolerate the oral contrast. He subsequently underwent an abdominal computerized tomography scan, which identified a large splenic flexure to distal colon intussusception. Radiology explained the intussusception was too extensive for an air enema, and as a result, pediatric surgery was consulted. An identifiable lead point remained unclear until surgical intervention.

J.P. underwent exploratory laparoscopy that revealed a large colonic polyp as the lead point. He had a colon resection with primary anastomosis. He was observed as an inpatient until he had return of bowel function. J.P. did well post-operatively and was discharged home within a few days.

IMAGING

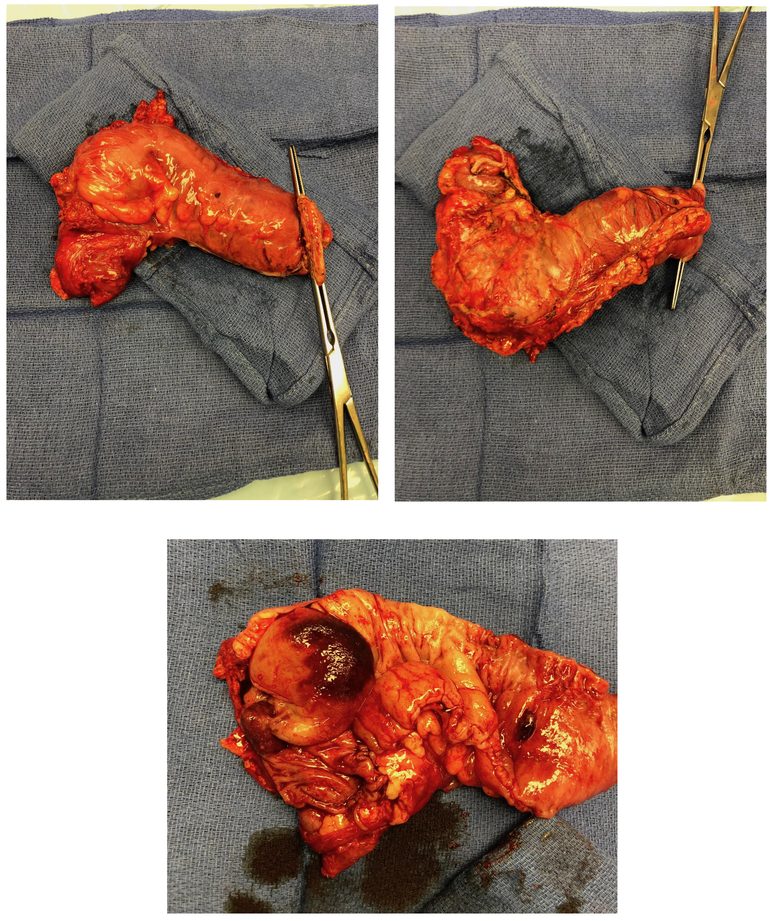

Figure 1: J.P.'s resected bowel with lead point revealed on transverse dissection, courtesy of Dr. Carmelle Romain, Assistant Professor of Surgery at the University of Chicago

CONCLUSION

Maintaining an open differential for abdominal pain decreases the risk for erroneous diagnoses. Healthcare professionals must be cognizant of a child's age when correlating history and physical exam findings with potential diagnoses in order to establish likelihood of benign versus pathologic etiology. Large colonic polyps that initiate intussusception are rare but must be considered, as they require inpatient monitoring and surgical intervention to alleviate the pain and obstruction.

SOURCES

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