Postpolypectomy Syndrome Presenting with Small Bowel Obstruction

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Introduction

Postpolypectomy syndrome (PPS) is a rare complication of colonoscopies with an incidence ranging from 0-2%. The pathophysiology behind the syndrome occurs when electrical current applied during a polypectomy extends past the mucosa into the muscularis propria and serosa. This results in a transmural burn and peritoneal inflammation, but no colonic perforation. Patients typically develop symptoms within 12 hours of the procedure, but may occur up to 7 days. Symptoms include abdominal pain, fever, leukocytosis, and peritoneal inflammation without perforation. The majority of cases can be managed with conservative treatment. In this case report, we present a postpolypectomy syndrome at the ileocecal valve resulting in a high grade small bowel obstruction.

Case Report

A 71 year-old male presented to the emergency department with abdominal pain, worsening distention, nausea, and emesis. Denies any bowel movements for 9 days and reports 1 day history of obstipation. Of note, patient had a colonoscopy 9 days prior where a large sessile polyp was removed adjacent to the ileocecal valve. A CT scan of the abdomen and pelvis (Figure 1) was obtained and demonstrated a possible transition point near the ileocecal valve. The patient was admitted for conservative management of small bowel obstruction. The next morning, a small bowel follow through (Figure 2) was obtained which showed a high grade small bowel obstruction with no contrast in the colon after 5 hours. He subsequently failed conservative management requiring surgical intervention

Case Report Cont.

Intraoperatively, The terminal ileum was densely adhered to the ileocecal valve and cecum requiring conversion to an open exploratory laparotomy. The ileocecal valve was encased in friable, fibrinous and exudative tissue surrounding the valve resulting in a mechanical small bowel obstruction. An ileocecectomy was performed with primary ileocolic anastomosis.

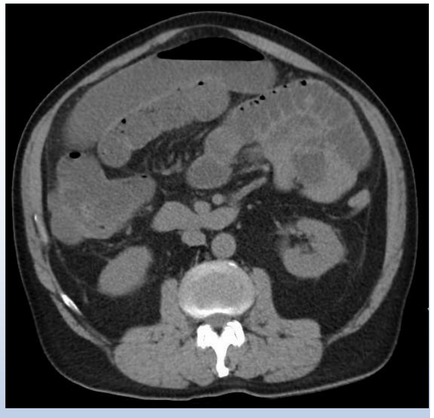


Figure 1. CT abd/pelvis, axial view

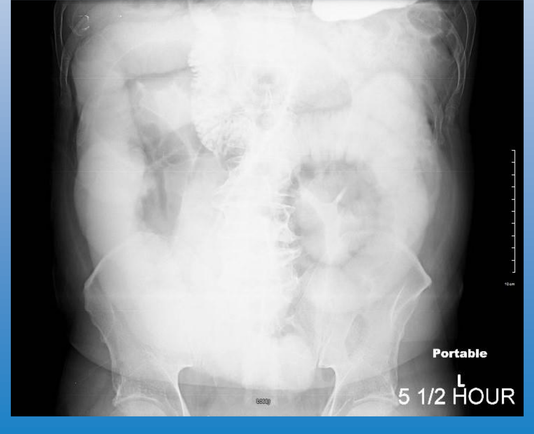


Figure 2. Small bowel follow through, 5 hour delay

Results

Pathology from our specimen demonstrated an ulcerated mucosal lesion in the cecum adjacent to the ileocecal valve with active serositis and inflammatory exudate. Over the next 5 days, the patient's diet was advanced and he was discharged in a stable condition.

Discussion

Given the findings on colonoscopy, the patient was a high risk for developing PPS. First, he had a large polyp >1 cm which increased his risk. Furthermore, the polyp was a sessile polyp. Lastly, the polyp was located in the cecum where the bowel thickness is less than other portions of the bowel. The most important aspect of this case was the location of the polyp on the upper lip of the ileocecal valve. The majority of PPS cases can be managed conservatively with intravenous fluids and antibiotics given that there is no bowel perforation. However, the localized peritoneal inflammation in this case resulted in a high grade small bowel obstruction requiring surgical intervention.

Conclusion

This case highlights the importance of obtaining accurate and specific records when making clinic decisions after a recent procedure. PPS has not been reported to cause small bowel obstruction. However, this case reports demonstrates that if PPS occurs at the ileocecal valve, the subsequent transmural and peritoneal inflammation can result in a high grade small bowel obstruction.