

Inferior Mesenteric Vein Thrombosis after Proctocolectomy with Ileal Pouch-Anal Anastomosis (IPAA) and Jejunal Pouch in a Patient with Ulcerative Colitis: A Case Report and Review of Literature

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Citation

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Abstract

Inflammatory bowel disease (IBD) is a known risk factor for venous thrombosis. Presentation of mesenteric vein thrombosis is atypical with non-specific abdominal complaints. A high degree of suspicion is needed to diagnose the condition. Here we present a patient with inferior mesenteric vein (IMV) thrombosis following total proctocolectomy with ileal-pouch anal anastomosis (IPAA) for ulcerative colitis (UC). Computer tomography scans of the abdomen obtained early in the course revealed the less likely diagnosis of inferior mesenteric vein thrombosis. This is the first reported case of IMV thrombosis following total proctocolectomy with IPAA for UC. Early radiological diagnosis and anticoagulant therapy improved the outcome in this patient.

INTRODUCTION

Patients with inflammatory bowel disease (IBD) have an increased risk of developing thromboembolic complications. Here we report a case of inferior mesenteric vein (IMV) and portal vein thrombosis following total proctocolectomy and ileal pouch-anal anastomosis (IPAA) for ulcerative colitis. IMV thrombosis as a complication following proctocolectomy has never been described before.

CASE REPORT

Three weeks after undergoing total proctocolectomy and IPAA, a 55-year-old white female presented with complaints of nausea, vomiting, diminished appetite, oliguria and passage of rectal mucous flecked with blood. She had a past medical history of ulcerative colitis, five spontaneous first trimester abortions, a remote history of node negative and hormone receptor positive stage I breast cancer treated with mastectomy and chemotherapy and a right upper extremity deep venous thrombosis from a chemotherapy port.

Physical examination revealed atrial fibrillation. Laboratory studies showed acute renal failure and severe thrombocytosis. Cardiac workup was negative. Doppler ultrasound of her lower extremities showed no evidence of

deep vein thrombosis. Computer tomography scans of the chest did not show any evidence of pulmonary emboli. Computer tomography scans of the abdomen done to exclude perforation revealed an inferior mesenteric vein thrombosis extending up to the portal vein and the splenic vein associated with small bowel wall thickening. Coagulation profile including protein C, protein S, antithrombin III and factor V Leiden were normal.

Patient converted spontaneously to normal sinus rhythm. Acute renal failure improved with intravenous fluid rehydration. Treatment with intravenous heparin followed by coumadin for three months was initiated. Follow-up gastrografin enema was negative for anastomotic leak and the patient was discharged home without any further complications.

Figure 1

Figure 1: Inferior Mesenteric Vein Thrombosis

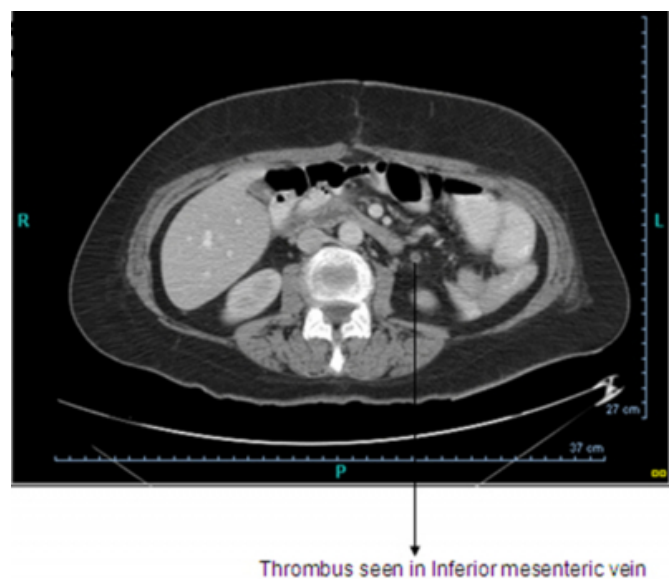


Figure 2

Figure 2: Portal Vein and Splenic Vein Thrombosis



DISCUSSION

Ileal-pouch anal anastomosis (IPAA), first described in 1970s by British and Japanese surgeons involves removal of the entire colon and rectum with preservation of the anus and sphincter muscles. A reservoir pouch created with the end portion of ileum is directly attached to the anus. A temporary and reversible ileostomy is used until the anastomosis heals.

IPAA is considered a gold standard in cases with chronic ulcerative colitis and inherited syndromes associated with a high degree of colon cancer risk. This procedure helps patients avoid living with permanent ileostomy.

Complications of the procedure include mesenteric vein thrombosis, small bowel obstruction, fistula formation, anastomotic separation and leak leading to pelvic infection, abscess, strictures and pouchitis (1).

Increased incidence of venous thrombosis is noted in IBD. In general, patients with mesenteric vein thrombosis (MVT) present with non-specific complaints making it a difficult diagnosis. It is more commonly discovered post mortem during autopsy than ante mortem (2, 3). Currently, there is no gold standard radiological diagnostic test to diagnose the condition (4, 6). Case reports of superior mesenteric vein thrombosis following proctocolectomy in IBD have been previously published (2,3,4,5,6,7,8,9). This is the first reported case IMV thrombosis following proctocolectomy with IPAA.

In a patient presenting with non-specific abdominal symptoms after a major abdominal surgery, a high degree of suspicion for MVT and ischemia is required. Computer tomography scans of the abdomen obtained early in the course revealed the less likely diagnosis of IMV thrombosis. Interestingly patient had a negative hypercoagulable workup. Early diagnosis and treatment improved the outcome in this patient. She had complete recovery and is currently on coumadin therapy. Current recommendation is three to six months of coumadin therapy but there are no prospective, randomized, double blind, controlled studies to support the duration of IMV thrombosis treatment.

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