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Case Report

Omental infarction following colonoscopy

Antonio Gangemi, Aqsa Durrani, Brian R. Boulay[1]

Department of Surgery, Division of General, Minimally Invasive and Robotic Surgery, [1]Department of Medicine, Section of Digestive Diseases and Nutrition, University of Illinois, Chicago, IL, USA

Abstract

Diagnosis of omental infarction, while rare, has become increasingly common likely due to improvements in diagnostic imaging. Reported incidence of omental infarction varies; however, omental infarction has not yet been described in association with colonoscopy. Common complications of colonoscopy include complications of sedation, complications of bowel preparation, and bleeding following polypectomy, and rarely, perforation or infection. We describe herein a case of a 63-year-old female who developed acute right lower quadrant abdominal pain following a colonoscopy. Abdominal computed tomography (CT) scan revealed omental infarction in the right lower quadrant. Conservative management was employed, and the patient was observed for resolution of symptoms. Repeat abdominal CT scan 2 weeks following initial presentation showed resolution of inflammatory changes associated with omental infarction. The patient also improved clinically. Omental infarction should be considered in patients presenting with acute abdominal pain following colonoscopy.

Key words

Omental infarction, colonoscopy, colonoscopy complications

Introduction

Omental infarction is an uncommon cause of acute abdominal pain. Reports of incidence place it generally <1% of appendicitis presentations.[1] Symptoms vary, but the most common symptom is abdominal pain, which could be present in any location. In past decades, omental infarction was primarily diagnosed during exploratory surgery for acute abdominal pathologies. With the advent of improved radiographic imaging, particularly the computed tomography (CT) scan, more cases of omental infarction have now been identified.[1-3]

Colonoscopies rarely result in serious complications. Approximately, 1.8 out of every 1000 colonoscopies results in a complication requiring hospitalization. Serious complications are also more likely to occur in the setting of polypectomy procedures. In this situation, the most common complications are gastrointestinal bleeding and colonic perforation.[4,5]

We present here a case in which a patient was found to have abdominal pain associated with omental infarction following a colonoscopy.

Procedure

The patient is a 63-year-old female with a past medical history of hypertension and remote history of resolved acute pyelonephritis and acute diverticulitis who presented with acute right lower quadrant pain 2 days following a routine colonoscopy. The colonoscopy was without complication; 50 μg of intravenous (IV) fentanyl IV and 2 mg of IV midazolam were used for sedation.

Three "diminutive" polyps were resected from the transverse colon and rectum. Diverticulosis was identified in the left colon,

Address for correspondence:
Dr. Antonio Gangemi, 840, South wood street, Suite 435E (M/C 958), Chicago, Illinois, 60612, USA. E-mail: agangemi@uic.edu

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and nonbleeding internal hemorrhoids were also present. The patient was discharged home in good condition following the procedure. She then presented to the emergency department with acute right-sided pain which developed approximately 1-day following colonoscopy. The pain was localized to the right lower quadrant, did not radiate, and was progressively worsening. Of note, the patient also had a predominantly left-sided abdominal pain which was more chronic and preceded the colonoscopy. The patient denied any associated symptoms such as nausea, vomiting, fevers, chills, dysuria or change in urine or bowel habits. Per patient report, she had 1–2 soft, brown bowel movements per day. The patient's last bowel movement was the morning of presentation to the emergency room, reportedly normal in color and consistency, and without significant pain or blood. The patient was taking enalapril daily for hypertension and pain medications and stool softeners as needed at home.

On presentation, the patient's vitals were within normal limits with the exception of a slightly elevated blood pressure (148/76). The patient had mild right lower quadrant tenderness to palpation on exam. Physical exam was otherwise benign.

Complete blood count, complete metabolic panel, lipase level, and urinalysis showed no abnormalities. CT scan of the abdomen and pelvis with and without intravenous and oral contrast was obtained [Figure 1]. Omental infarction was identified in the location corresponding to the patient's pain. Other findings were consistent with previous CT scans.

The patient was admitted for observation. Conservative medical management included intravenous hydration, pain management, and serial abdominal exams. The patient was made nil per os until pain resolved.

After 24 h of observation and pain control, the patient was tolerating a general diet per os, had normal bowel movements, and had improved clinically. She was discharged with a home pain regimen and stool softeners and instructions regarding when to return to the hospital.

On follow-up 5 days following admission, the patient reported a marked improvement in her symptoms with minimal residual pain and continued tolerance of a general diet.

On follow-up 2 weeks following admission, the patient had complete resolution of her pain. Repeat CT scan of the abdomen and pelvis [Figure 2] showed near total resolution of inflammatory changes associated with the omental infarction.

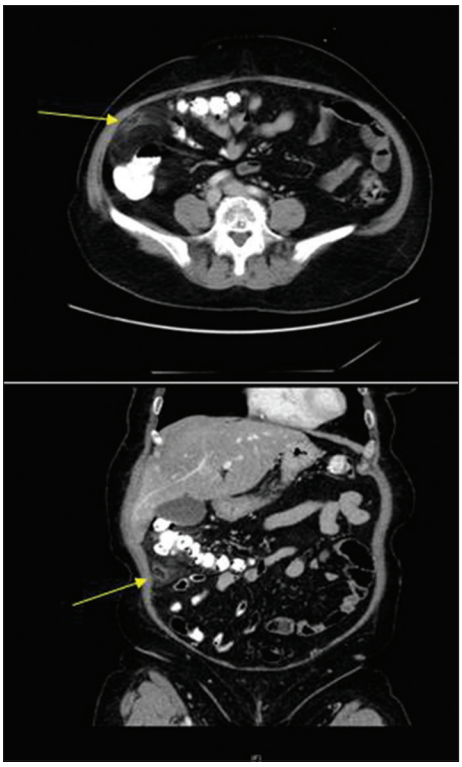

Figure 1: Initial computed tomography scan. Right lower quadrant fat-stranding consistent with small omental infarction in location of patient's pain as indicated by the pointing arrow

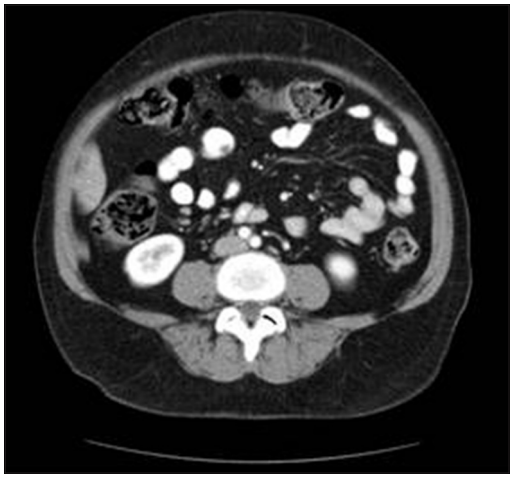

Figure 2: Repeat computed tomography scan 2 weeks following the presentation. Near total resolution of inflammatory changes associated with omental infarction

Conclusion

Omental infarction is a rare clinical finding and is typically not considered in patients with acute abdominal pain. In patients who have recently undergone colonoscopic procedures, it is considered even less. Attention is more often turned to perforation secondary to mechanical trauma or increased colonic pressure as a likely cause for acute abdominal pain following a colonoscopy. However, perforation is more likely associated with peritonitis pain, nausea, vomiting, and fever.

This is the first described case of omental infarction following colonoscopy. In patients presenting with acute abdominal pain following a colonoscopic procedure, omental infarction should

be included in the differential diagnosis, especially in patients without peritonitis pain and without nausea, vomiting, or fever.

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Conflict of interest
There are no conflict of interest.

References

1. Itenberg E, Mariadason J, Khersonsky J, Wallack M. Modern management of omental torsion and omental infarction: A surgeon's perspective. J Surg Educ 2010;67:44-7.
2. Barai KP, Knight BC. Diagnosis and management of idiopathic omental infarction: A case report. Int J Surg Case Rep 2011;2:138-40.
3. Park TU, Oh JH, Chang IT, Lee SJ, Kim SE, Kim CW, *et al.* Omental infarction: Case series and review of the literature. J Emerg Med 2012;42:149-54.
4. Whitlock EP, Lin JS, Liles E, Beil TL, Fu R. Screening for colorectal cancer: A targeted, updated systematic review for the U.S. Preventive Services Task Force. Ann Intern Med 2008;149:638-58.
5. Chukmaitov A, Bradley CJ, Dahman B, Siangphoe U, Warren JL, Klabunde CN. Association of polypectomy techniques, endoscopist volume, and facility type with colonoscopy complications. Gastrointest Endosc 2013;77:436-46.