

CLINICAL IMAGES

Epiploic appendagitis

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Previously published at www.cmaj.ca

A 33-year-old man was admitted to the emergency department with a rapid onset of left flank pain.

On examination, he had a temperature of 38.2°C and tenderness in the left lower quadrant with muscle guarding. His leukocyte count and C-reactive protein were moderately elevated. Computed tomography of the abdomen (Figure 1) showed an oval-shaped, paracolic mass with the density of fat. A diagnosis of epiploic appendagitis was made. He was given a one-week course of ibuprofen, and recovered completely. He had no recurrence of the pain during two years of follow-up.

Epiploic appendages are small, fat-filled, serosa-covered structures located on the antimesenteric surface of the colon. These structures are usually 0.5- to 5-cm long and 1- to 2-cm thick, and hang into the peritoneal cavity. Although the total number of epiploic appendages on the colon is about 100, the size and number increase in the lower abdominal quadrants (57% are located on the sigmoid colon and 26% on the ileocecum).^{1,2} Epiploic appendages have no known function. Vascularization of an appendage is provided by two arteries and one vein. In the case of torsion, the venous component is affected first with subsequent inflammation.

Primary epiploic appendagitis caused by torsion is distinguished from secondary appendagitis, which can occur in patients with pericolic inflammatory fluid, as in colitis.² Other proposed causes are lymphoid hyperplasia or bacterial invasion secondary to a deep abdominal infection (e.g., diverticulitis, appendicitis or cholecystitis) making the coexistence of these pathologies possible.^{1,3} The prevalence is unknown because most cases are self-limited.⁴ It has a peak incidence in the fourth and fifth decades but can occur at any age, with a slightly higher frequency in middle-aged men.¹

Patients present with nonspecific, acute pain in the abdomen, predominantly in the lower quadrants. The symptoms mimic those of acute appendicitis or diverticulitis.

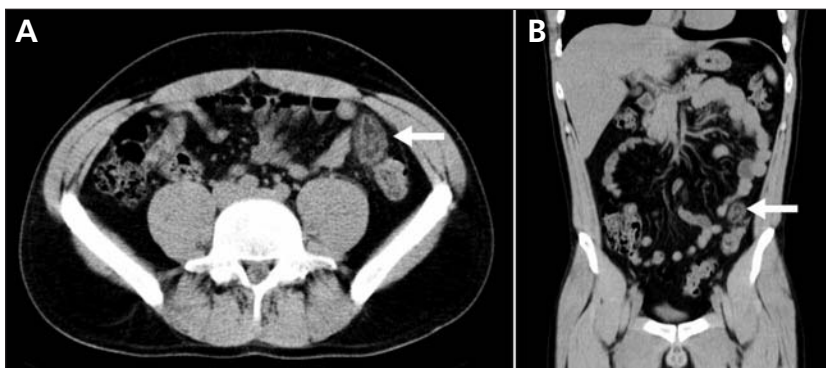


Figure 1: Computed tomography of the abdomen of a 33-year-old man with left flank pain. (A) The axial view shows an oval-shaped, paracolic mass with the density of fat (arrow). (B) The frontal view shows a paracolic mass with thickened peritoneal lining and periappendiceal fat stranding (arrow).

Guarding is reported in about half of patients and low-grade fever is seen in a minority of patients.² Abdominal ultrasonography can show nonspecific findings such as an oval hyperechoic mass surrounded by a hypoechoic rim, without Doppler flow. The pathognomonic appearance on computed tomography is typically a 1- to 4-cm oval-shaped, fat-density lesion with an enhancing rim adjacent to the colon, thickened visceral peritoneal lining, and periappendiceal fat stranding,⁵ as seen in our patient.

Epiploic appendagitis is usually a self-limiting condition that can be managed conservatively with oral anti-inflammatory medications.³ Complications such as secondary abscess or intestinal occlusion are uncommon.^{3,5}

This article has been peer reviewed.

Competing interests: None declared.

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