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## CLINICAL VIGNETTE

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# Epiploic Appendagitis

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### Case Presentation

A 36-year-old male presented to the ambulatory clinic complaining of abdominal pain. The pain had been present for the past 8-9 days and was becoming progressively more severe. When asked specifically, the pain localized to the left iliac fossa, was constant in duration and frequency, sharp in quality, 7/10 in severity, without radiation, exacerbated by movement and touch, and somewhat alleviated by rest and lying supine. The patient denied any associated fever, chills, weight loss, night sweats, nausea, vomiting dysphagia, or bowel changes.

His past medical history was largely unremarkable with the exception of several sleep parasomnias. Social history revealed moderate alcohol use, with the consumption of two beers per day with no tobacco or drug use. He had no prior history of surgery, with intact gallbladder and appendix. Family history was negative for gastrointestinal disease or malignancy. Vital signs included: T 98°F, BO 140/74, and pulse 75/m. Physical examination revealed a non-distended abdomen with normal bowel sounds that was exquisitely tender to palpation in the left lower quadrant. There was no hepatosplenomegaly but presence of guarding and rebound tenderness.

An acute surgical abdomen was suspected and the patient was strongly advised to go to the emergency room for immediate workup. However, the patient adamantly refused but did agree to obtain STAT labs and ambulatory imaging. He agreed to go to the emergency room should his symptoms worsen. The patient did not obtain blood testing, but obtained computed tomography (CT) of the abdomen and pelvis with contrast which revealed focal inflammatory changes at the rectosigmoid junction and surrounding adjacent fat lobule, most consistent with epiploic appendagitis. No other areas of inflammatory change were noted and a normal appendix was identified with no free fluid or fluid collection.

A diagnosis of epiploic appendagitis was started on ibuprofen 600-800 mg every eight hours for four to six days. His symptoms improved over the next 72 hours with complete resolution.

### Discussion

Epiploic appendixes are small (0.5–5.0 cm long) outpouchings of peritoneum filled with fat and small vessels that protrude from the serosal surface of the colon. They occur in the rectosigmoid junction (57%), ileocecal region (26%), ascend-

ing colon (9%), transverse colon (6%) and descending colon (2%).<sup>1</sup> Epiploic appendagitis is caused by torsion of an epiploic appendage or spontaneous venous thrombosis of a draining appendageal vein.<sup>2</sup> Epiploic appendagitis may be primary or secondary. Secondary epiploic appendagitis is associated with inflammation of adjacent organs, and can present as diverticulitis, appendicitis, or cholecystitis. Epiploic appendagitis generally occurs in the second to fifth decades of life with a mean age of 40 years. The incidence has been reported to be up to four times higher in men as compared with women.<sup>3-5</sup>

Patients with epiploic appendagitis most commonly present with acute or subacute lower abdominal pain. The pain is in the left abdomen in 60 to 80 percent of patients, but has also been reported in the right lower quadrant. The pain has been described as a constant, dull, localized pain that does not radiate.<sup>6</sup> Other, less frequent symptoms include postprandial fullness, early satiety, vomiting, bloating, diarrhea, and low-grade fever.

The presenting clinical symptoms of epiploic appendagitis are non-specific, often leading to misdiagnosis in most patients. The white blood count, erythrocyte sedimentation rate, and C-reactive protein are usually normal, but may be mildly elevated.<sup>7,8</sup> The pain may be exacerbated by coughing, deep breathing or stretching because the infarcted appendage is adherent to the parietal peritoneum. Signs and symptoms are generally self-limited and rarely last more than 1 week.<sup>7,9</sup> The non-specific symptoms may mimic appendicitis, diverticulitis, omental infarction, pelvic inflammatory disease or a ruptured ovarian cyst.<sup>10</sup>

Abdominal CT is diagnostic for epiploic appendagitis, while excluding other causes of abdominal pain. On CT, the lesion appears as a fatty mass which is connected to the serosal surface of the colon and has slightly higher attenuation than peritoneal fat. All masses have periappendiceal fat stranding, and a few may have a central dot of high attenuation, possibly caused by a thrombosed vessel in the epiploic appendix or by the opposing surfaces of two adjacent appendixes.<sup>11</sup>

Epiploic appendagitis is a benign and self-limiting condition disease and conservative treatment with analgesics is usually sufficient.<sup>12</sup> Complete resolution without surgical intervention usually occurs between 3 to 14 days. Complications such as intussusception, bowel obstruction, and abscess are rare.

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