EPIPLOIC APPENDAGITIS

Introduction

- Epiploic appendagitis, also known as appendicitis epiploica, is a benign and self-limited condition that occurs secondary to torsion of the epiploic appendages.
- Inaccurate diagnosis can lead to unnecessary hospitalizations, antibiotic therapy, and surgical intervention.
- Occurs most commonly in the second to fifth decades of life; mean age is 38 years. Similar incidence among men and women.

Anatomy

- Epiploic appendages are subserosal fat structures, present on the external surface of the colon projecting into the peritoneal cavity.
- The appendages are situated along the entire colon and are more abundant and larger in the sigmoid colon.
- They are largest and most prominent in obese persons and in those who have recently lost weight.
- The average length is 3 cm, although they are occasionally up to 15 cm.
- They are presumed to serve a defensive mechanism similar to that offered by the greater omentum. They may also act as a protective cushion during peristalsis.
- Each appendage encloses small branches of the circular artery and vein that supply the corresponding segment of the colon.
- Subserosal lymphatic channels either terminate in a lymph node within an appendage or loop through its base en route to mesenteric nodes.

Pathophysiology

- Epiploic appendagitis is usually caused by torsion, which occurs when the appendage is abnormally long and large.
- The affected site is the sigmoid colon or cecum in 75% of patients.
- There are other less common conditions affecting the epiploic appendices
    - sliding into a hernia.
    - can also calcify, cast off, and lie free as foreign bodies in the peritoneal cavity
    - become surrounded by omental adhesions.

Clinical Manifestations

- Patients most commonly present with acute abdominal pain.
- Symptoms can mimic an acute abdomen, frequently leading patients to be misdiagnosed as having acute appendicitis or diverticulitis.
- Patients usually do not appear to be seriously ill and are afebrile
- There is localized pain in the affected area, more often in the left lower quadrant.
- A mass is palpable in 10 to 30 percent of patients.
- The WBC count is normal or only moderately elevated.

Diagnosis

- Should be considered in the differential diagnosis of patients presenting with localized lower abdominal pain without leukocytosis or fever.
- Reported in 2 - 7% of patients in which a clinical suspicion of diverticulitis was entertained and in 0.3 to 1 percent of patients suspected of having appendicitis.
- CT findings are pathognomonic while excluding other causes of abdominal pain.
- The classic finding is a 2 to 3 cm, oval-shaped, fat density, paracolic mass with periappendageal fat stranding.
- On ultrasound the inflamed appendage appears as a non-compressible, solid, hyperechoic ovoid mass that is fixed to the colon and located at the point of maximal tenderness.

Treatment

- Appendagitis is a benign and self-limiting condition.
- Patients can be managed conservatively with analgesics.
- Complete resolution usually occurs between 3 to 14 days.
- The majority of patients respond to treatment in 4 to 7 days.
- As a general rule, patients do not require hospitalization or antibiotics.
- Complications are uncommon
    - intestinal obstruction
    - intussusception
    - abscess
- The risk of recurrence has not been described but is probably very low.

References:

- Legome, EL, Belton, AL, Murray, RE, et al. Epiploic appendagitis: the emergency department presentation. J Emerg Med 2002; 22:9.
- Rao, PM, Rhea, JT, Wittenberg, J, Warshaw, AL. Misdiagnosis of primary EA. Am J Surg 1998;
- 176:81.
- Carmichael, DH, Organ, CH Jr. Epiploic disorders. Conditions of the epiploic appendages. Arch Surg 1985; 120:1167.
- Rao, PM, Rhea, JT, Novelline, RA, et al. Effect of computed tomography of the appendix on treatment of patients and use of hospital resources. N Engl J Med 1998; 338:141.