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RESEARCH ARTICLE

PRIMARY EPIPLOIC APPENDAGITIS: A RARE CAUSE OF ACUTE ABDOMEN

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Abstract

Primary epiploic appendagitis are rare causes of acute abdomen. It results from a torsion of an epiploic appendix, with spontaneous ischemia or venous thrombosis. We report the case of a 34-year-old patient who consults for intense pain in the right iliac fossa with nausea and constipation, but without fever. The physical examination shows a defense of the right iliac fossa. The CT scan shows a significant infiltration on the anti-mesenteric edge of the cecum. The diagnosis of primary epiploic appendagitis is made and the patient is progressing well under medical treatment.

Introduction:-

The epiploic appendages (or epiploic fringes) are subperitoneal fatty formations, formed by a duplication of the visceral peritoneum covering the colon. They are distributed in two lines along the colonic strips. These fatty formations contain vessels resulting from colonic vascularization. They are more numerous on the sigmoid and the cecum, absent on the rectum. Their size varies between 0.5 and 5 cm long **[1,2].** An appendagitis, or epiploic fringe torsion, is an isolated inflammation of an epiploic appendix. This results from 3 main mechanisms: torsion of the vascular pedicle, thrombosis of the drainage vein, and secondary inflammation **[3].** Depending on its location, can simulate either acute appendicitis or diverticular sigmoiditis. Advances in medical imaging now make it possible to avoid unnecessary surgical interventions. This is illustrated by the observation presented here.

Observation:-

M., 34 years old, with a history of cesarean delivery 2 times, the last of which was 3 months ago, presented himself at the hospital emergency room on October 04, 2024, for intense right iliac fossa pain assessed at 6/10 on a visual analog scale, of sudden onset evolving for four days, associated with constipation and nausea without vomiting. She had no urinary or gynecological complaints. At the clinical examination; apyretic (37.2 ° c), tachycardia at 105 beats / min, blood pressure at 130/80 mmhg, FR at 23 cycles / in, Abdominal palpation showed pain in the right iliac fossa with defense but the abdomen remains flexible and depressible. There was, moreover, an overweight with a BMI of 29.

Blood biology showed hyperleukocytosis at 11,5800 white blood cells per mm3 (4,000 - 10,000) with a high CRP at 33.9 mg/l (0-6 mg/l), normal renal function (creatinine at 3mg/l, urea at 0.3g/l). The cytobacteriological examination of the urine was negative.

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Given the pain and the biological inflammatory syndrome, an abdominal CT scan with contrast medium injection was requested and demonstrated a significant infiltration on the anti-mesenteric edge of the cecum evoking appendagitis (see figs. 1, 2). In view of these clinical, biological and radiological arguments, the diagnosis of appendagitis was retained

The patient was placed on non-steroidal anti-inflammatory drugs (ketoprofen (Profenid) 100 mg, three times/day) and paracetamol 1g per 8 hours with gastric protection by omeprazole 20mg/day

At d2, abdominal palpation objectified a significant decrease in the pain of the right iliac fossa with normalization of transit.

The biology carried out, on d3, noted a decrease in the inflammatory syndrome: CRP at 15 mg /l (N < 5), leukocytes at 8200 per cubic millimeter, including 4176 neutrophilic polynuclear cells.

The good clinical-biological evolution allowed the discharge on day 3, under ketoprofen 50 mg three times a day.

The patient was seen again in consultation on the 17th day. His clinical examination and his biology were normal. The ketoprofen had been stopped on the 7th day.

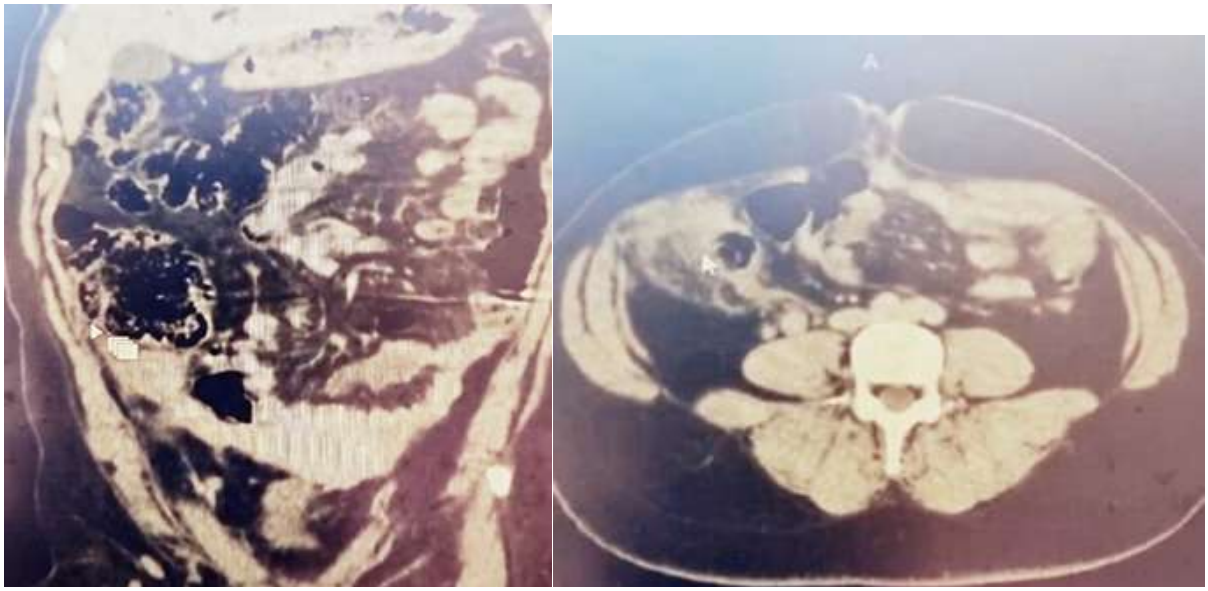

Fig 1,2: -Retroperitoneal infiltration on the anti-mesenteric edge of the cecum evoking appendagitis.

Discussion:-

An epiploic appendix is a fat formation under the pelvic serous surface of the colon, covered with peritoneum. The typical length is from 0.5 to 5 cm **[4].** The preferred location is the left colon and the cecum second. The number can be high (up to 100). A healthy epiploic appendicitis is not visible spontaneously.

Their precarious vasculature and their pediculated morphology predispose them to torsion phenomena, ischemia and inflammation, phenomena grouped under the name of appendagitis**[1].**

Epiploic appendagitis is rare and can occur at any age, with a slight preponderance of middle-aged men between 40 and 50 years old. Obesity or overweight seems to be the only recognized risk factor **[5].**

The incidence of this pathology is not really known; it would vary between 2 and 7% in patients hospitalized for suspected appendicitis or sigmoiditis **[6,7].** According to Singh et al. **[8],** the diagnosis of epiploic appendagitis is found in approximately 7.1% of patients in whom sigmoid diverticulitis was initially suspected.

The abdominal pain is constant, variable depending on the location of the pathological appendix, but always very localized. It is more frequently located in the lower dials (right and left iliac fossa) where the appendages are the most voluminous **[1].**

Nausea, vomiting and fever may also be present. Due to the peritoneal adhesion of the infarcted appendix, clinical signs of peritoneal irritation can be noted: localized defense, abdominal decompression pain, increased pain on mobilization, forced coughing or deep inspiration. The clinical picture can mimic diverticulitis but also appendicitis, cholecystitis, ectopic pregnancy or appendix torsion **[9].**

Biologically, there may or may not be a slight inflammatory syndrome **[1].**

From the radiological point of view, only ultrasound and computed tomography allow the diagnosis to be made reliably **[10,11].** During a primary epiploic appendagitis, ultrasound finds an ovoid hyperechoic mass corresponding to the fatty nodule, non-depressible, in the clinically painful area, surrounded by a hypoechoic peripheral halo **[1,4,8].** Computed tomography makes it possible to confirm the diagnosis by showing a characteristic image of a subparietal shuttle fat lesion having a density slightly higher than normal fat, surrounded by a hyperdense border, associated with infiltration of peripheral fat **[8,12,13].**

Primary epiploic appendagitis treated symptomatically with analgesics, non-steroidal anti-inflammatory drugs, regress clinically spontaneously in less than a week, with an early decrease in inflammatory signs in computed tomography **[2].** The control examination is not essential. Antibiotic treatment is not indicated **[14].**

Primary epiploic appendagitis remains a benign pathology mimicking a misleading surgical picture. The scars of primary epiploic appendagitis can rarely be responsible for intussusception or intestinal obstruction due to the formation of inflammatory bridle **[2].**

Conclusion:-

Primary epiploic appendagitis is a rare pathology and an uncommon cause of acute abdominal pain simulating a surgical picture, often unknown, which is a medical treatment. Computed tomography makes the diagnosis with certainty, thus avoiding an unnecessary laparotomy.

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