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Case Report

Omental Appendagitis: A Rare Cause of Acute Abdominal Pain

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Abstract: Omental appendagitis is an inflammation of the pedunculated fatty fringes of the colonic serosa, sometimes confused with appendicitis or diverticulitis. We report the case of a diabetic and hypertensive subject who underwent a cholecystectomy and a left inguinal hernia, was referred for abdominal pain associated with a pseudo-surgical abdomen with a positive inflammatory assessment and an abdominal CT scan in favor of acute appendagititis, and improved with level 2 anti-inflammatory steroid and analgesic treatment. Acute appendagitis constitutes a rare emergency for which therapies and downstream monitoring are specific.

Keywords: Appendagitis, abdominal pain, emergency.

INTRODUCTION

Omental appendagitis is an acute inflammation of the fatty fringe of the colonic omentum whose frequency is estimated at approximately 1.3% of acute abdominal pain. Expressed on both the right and left flanks, it clinically suggests possible acute appendicitis, diverticulitis, infarction of the greater omentum, or mesenteric panniculus. The diagnosis is essentially made by CT imaging, which makes it possible to avoid antibiotic therapy or surgery, which are unnecessary in this clinical circumstance.

OBSERVATION

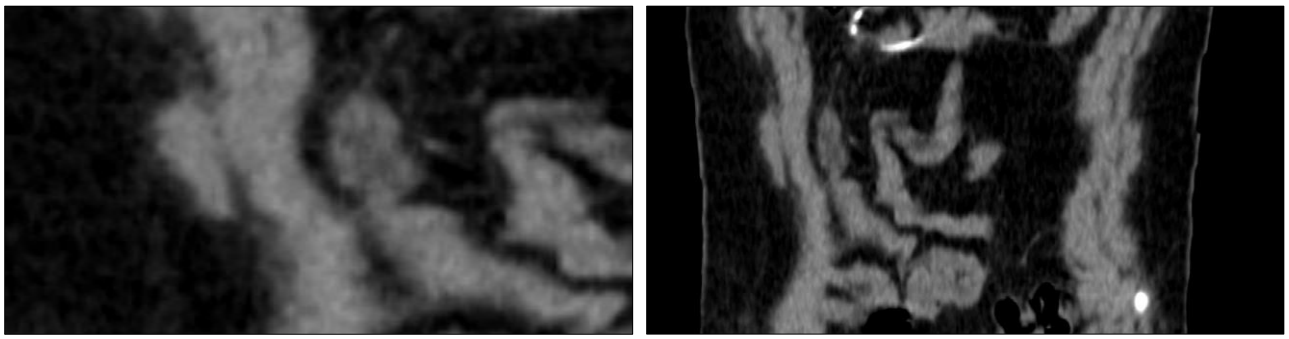
A 43-year-old male patient was hospitalized for abdominal pain lasting for 5 days in the context of maintaining his general condition. His history was marked by high blood pressure on antihypertensive medication with Amlodipine 10 mg/day for 4 years, type 2 diabetes on insulin therapy for 11 years, an operation for a cholecystectomy 5 years ago, and an operation for an inguinal hernia repair. Left two years ago.

The patient reported abdominal pain of moderate intensity, generalized, and maximal at the level of the right flank and iliac fossa, without irradiation, without a particular analgesic position, and without aggravating or relieving the pain. The clinical examination of this afebrile patient reveals a painful tympanic abdomen in context with slight guarding at the level of the right flank and the right iliac fossa without contracture or abdominal guarding, associated with nausea and early postprandial vomiting of food, without cessation of materials. Or gas, without transit disorders or other digestive signs, in particular no externalized upper or lower digestive hemorrhage, without abdominal distention, and without associated extra-digestive signs. The biological assessment found hyperleukocytosis at 13,750/mm3 and neutrophils at 9990/mm3. C-reactive protein was elevated at 64 mg/L. Blood sugar is 1.18 g/L, creatinine clearance is 67 ml/min, and lipase is 43 U/L. The urine dipstick was without abnormality.

Abdominal ultrasound ruled out renal colic, while abdominal CT found an oblong inflammatory

abdominal formation with a long axis of 28 mm (Figures 1 and 2), at the level of the right flank, the site of changes, with a fatty center and wall-thickened tissue measuring 5.4 mm without an abscessed image, suggestive of appendagitis (Figure 3). The clinical and biological evolution was favorable; the patient benefited from treatment with level 2 anti-inflammatory steroids and analgesics, which relieved the pain in 3 days with normalization of the biological assessment (white blood cells and C-reactive protein).

The patient was seen again at the consultation after 30 days; he was painless, and his clinical examination and biology were normal.



Figures 1 & 2: Individualization of an oblong abdominal formation next to the surgical scar (right flank), which is the site of post-operative changes, with a fatty center and a thickened tissue wall measuring 5.4 mm.

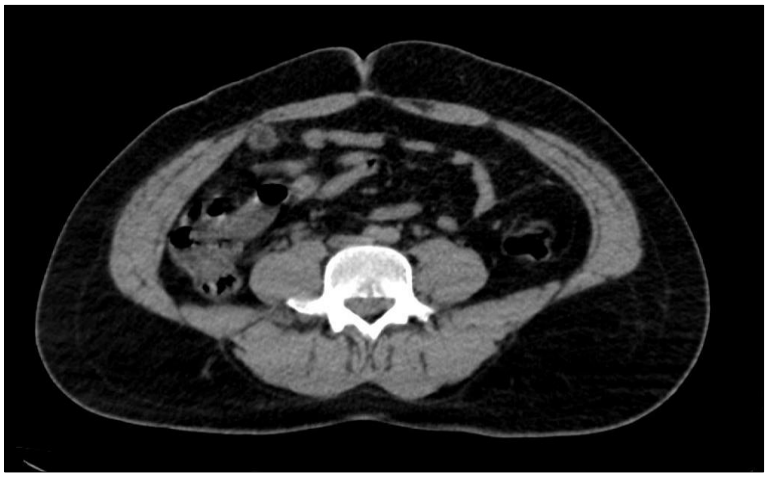


Figure 3: Cross-sectional scan showing an aspect of appendagititis under the formation of a formation at the level of the right flank

DISCUSSION

Primary omental appendagititis is a rare pathology that results from torsion with ischemia or spontaneous venous thrombosis of an omental appendix [1]. The first observation of this entity was described by Lynn *et al*., [2]. The incidence of this pathology is not really known, and it varies from 2 to 7% in patients hospitalized for suspected appendicitis or sigmoiditis. However, the prevalence of appendagitis is underestimated due to the number of underdiagnosed cases. It occurs in adults between 20 and 50 years old, with a slight male predominance. The omental appendages correspond to subperitoneal fatty formations whose length varies from 5mm to 50mm (30mm on average). They are distributed along the colonic frame and are absent from the rectum; their locations are, in order of frequency, at the level of the rectosigmoid hinge (57%), the ileo-caecal region (26%), the ascending colon (9%), the transverse colon (6%), and the descending colon (2%). The location of our patient was the right flank. Their physiological functions are not clearly defined [3, 4]. Their precarious vascularization and their pedunculated morphology predispose them to phenomena of torsion, ischemia, and inflammation, phenomena grouped under the name appendagitis. The clinical picture is not specific. This pathology manifests clinically as localized abdominal pain, which often suggests ileocecal appendicitis or diverticulitis; other accompanying signs such as transit disorders, nausea, vomiting, or fever are rare. The blood count sometimes shows

moderate leukocytosis. On the other hand, given this symptomatology, the diagnosis of appendagitis is rarely mentioned, hence the importance of imaging. Ultrasound shows an anterior subparietal hyperechoic fatty nodule, in contact with the normal colonic image. In contact with an otherwise normal colon. Abdomino-pelvic computed tomography with injection of iodinated contrast material is the reference examination for appendagitis. It can make the diagnosis by showing a hypodense nodule adjacent to the wall of the colon, with a hyperdense peripheral border reflecting inflammation of the serosa [4]. Diagnostic laparoscopy is a diagnostic alternative when abdominal CT is contraindicated, unavailable, or when there is diagnostic doubt, such as in the case of our first two patients. Indeed, laparoscopy currently has a recognized place in reducing wall morbidity following laparotomies and shortening the length of hospitalization [5, 6]. It not only allows rapid diagnosis without multiplying imaging but also allows treatment of the lesion by avoiding laparotomy in many cases, as illustrated by the case of three of our patients. Treatment of appendagitis is always conservative with analgesics (paracetamol) and anti-inflammatory medications for around ten days. The symptoms often resolve spontaneously in less than a week [7].

CONCLUSION

Given the frequency of consultations for abdominal pain in hospital emergencies and considering the prevalence of omental appendagitis, it seems important to identify the symptomatological bases and the diagnostic means. Although it can occur at any age, this inflammation should mainly be seen in obese 40-year-old men, presenting with very localized abdominal pain without major repercussions on transit and accompanied by very moderate or even non-existent inflammatory biology. Abdominal ultrasound can allow its identification but is sometimes faulty. The diagnosis is then based on the scan-graphic images, which allow the implementation of anti-inflammatory and analgesic treatments.

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