

Case Report

An Unusual Cause of Abdominal Pain: Valentino's Syndrome. A Case Report

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1. Abstract

Valentino's syndrome is a rare entity that can mimic an acute appendicitis caused by the presence of a peptic ulcer which perforated appendicitis causes reactive drainage. Present a case 52- year-old male with clinical symptoms, radiographic and ultrasonographic data appendicitis, which is subjected to laparotomy finding chemical periappendicitis attended by sliding FID turbid liquid in right paracolic, Morrison and pelvic cavity space is presented as well as the presence of a perforated duodenal ulcer, biopsy was performed and ulcer closure with omentum patch, appendectomy cavity and wash and drain placement. The postoperative course was good, with tolerance of liquid on the third day, normal diet and exit the fifth day with proton pump inhibitor, cited for performing upper endoscopy 6 weeks, which was conducted demonstrating complete healing of the ulcer.

2. Keywords: Acute appendicitis; Perforated peptic ulcer; Valentino's syndrome, Peri-appendicitis

3. Introduction

Right lower quadrant pain is a frequent symptom in the emergency department. Acute appendicitis is a common cause of right lower quadrant pain, however, a wide spectrum of common and rare pathologies can simulate acute appendicitis and present a diagnostic challenge for the clinician [1, 2].

Less frequently diagnosed conditions that can simulate an acute disease such as appendicitis include a perforated peptic ulcer, mucocele of the appendix, rupture of an ectopic pregnancy, ovarian torsion, endometriosis, infarcted uterine leiomyoma, pseudomembranous colitis, perforated cholecystitis, pancreatitis, and diverticulitis.

3. Case Report

A 52-year-old male with no significant chronic degenerative history, who began his condition with constant sudden severe pain in the periumbilical region, which migrated hours later to the right lower quadrant accompanied by one episode of nausea and vomiting as well as anorexia. On physical examination, the patient presents with an anti-algic position, flushing of the skin and oral mucosa, dehydrated. On abdominal physical exam, there was pain on right lower quadrant palpation, a positive Mc Burney, Rovsing, psoas, and Von Blumberg signs; on auscultation a decreased peristalsis was present. Lab studies were irrelevant except for the presence of neutrophilia. Abdominal ultrasound reported free fluid in the sub hepatic space, Morrison's space, posterior cul-de-sac, and in the right iliac fossa with increased fat echogenicity, without peristalsis, a retrocecal 10 mm diameter tubular image was observed, which could not be modified when pressure was applied. The ultrasonographic study suggested the presence of an acute appendicular picture. This and the clinical findings lead to perform an exploratory laparotomy with the following surgical findings: edema and hyperemia of the appendix (Figure 1), turbid and non-fetid seropurulent fluid (approximately 150cc in the right iliac fossa) and 6mm diameter anterior duodenal ulcer. A biopsy of the edges of the ulcer and primary closure with the placement of a greater omentum patch, lavage of the cavity with abundant saline solution in all quadrants, and appendectomy were performed, a Penrose-type drain was placed in the right parietocolic gutter.

The pathological examination revealed the presence of acute peri-appendicitis (Figure 2) with acute and chronic inflammation, negative for malignancy. 3 month follow up surveillance endoscopy showed the presence of adequate ulcer healing (Figure 3). The Histopathological report of the ulcer showed no signs of malignancy.

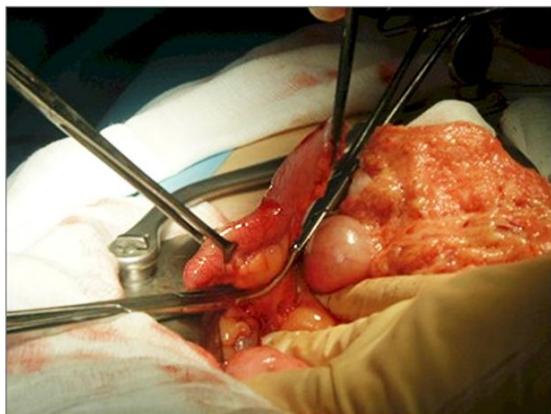


Figure 1: Intraoperative image of the appendix. Erythema of the appendix is observed.

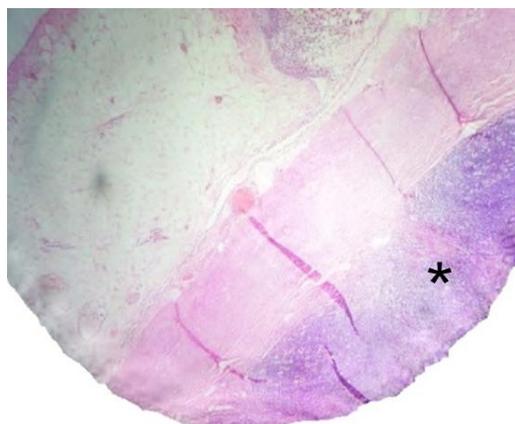


Figure 2: Hematoxylin and eosin staining of the appendix. Edema of the appendiceal wall (asterisk).

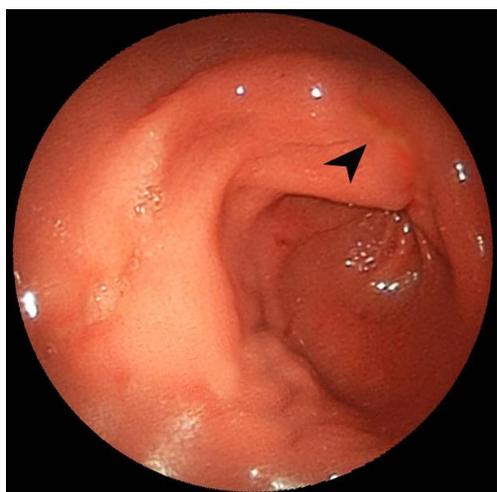


Figure 3: Surveillance endoscopy showing signs of duodenal ulcer healing.

4. Discussion

Valentino's appendicitis or Valentino's syndrome was described when in 1926 Rodolfo Valentino, a famous American actor presented with the signs and symptoms of acute appendicitis at the New York City Polyclinic, an appendectomy was performed but after the surgical procedure, the patient developed generalized peritonitis, multi-organ failure, and later died. The autopsy revealed that he had been suffering from a perforated gastric ulcer. Pain in the right abdominal quadrant is a common presenting symptom such as presented above. Chemical contents from the perforated peptic ulcer had dripped down the right parietocolic gutter into the right iliac fossa causing localized peritoneal irritation in the right iliac fossa, the presence of suppurative fluid, and mild inflammation of the appendix (Chemical Periappendicitis) should prompt the search for other pathologies that can give rise to this clinical picture to avoid disastrous consequences [1-4]. A literature search of Valentino's appendicitis case reports was conducted in the Cochrane, Medline, and Google Scholar databases. Only 4 such cases of Valentino's syndrome have been reported in the literature at the time, where one of the patients was treated conservatively with antibiotics, the other with laparotomy as in the depicted case, one more by laparoscopy and the other diagnosed during the preoperative evaluation [5-7]. In 2006, Wang et al. reported the case of a 72-year-old male who attended the emergency department for presenting abdominal pain in the right lower quadrant of 2 days of evolution. Her past medical history was relevant to the use of non steroidal anti-inflammatory drugs. An abdominal CT scan showed right perirenal air extended to the retroperitoneum. Endoscopy presented with multiple gastric and duodenal ulcers. A perforated duodenal ulcer was the cause of his symptoms. The patient was managed with parenteral antibiotics with an uneventful recovery [5]. In 2005, Hsu et al. Presented a 23-year-old pregnant woman of 20 weeks gestation with abdominal pain located in the right lower quadrant of 3 days of onset. Past medical history revealed an untreated duodenal ulcer. During the physical examination, she presented signs of epigastric and right lower quadrant tenderness. The ultrasound showed the presence of fluid around the cecum. An appendectomy with a Mc Burney-type incision was performed and 50 ml of cloudy liquid were obtained with an unaffected appendix. An extended laparotomy was then performed and a perforated duodenal ulcer was observed and accordingly treated [6]. In 2012, presented a 30-year-old woman with signs and symptoms suggestive of appendicitis. During laparoscopic surgery, the normal appendix was found to be surrounded by cloudy fluid from the sub hepatic space. In a further extension of the laparoscopic procedure, a perforated pre pyloric ulcer was found. Peritoneal lavage was performed and the ulcer was repaired with a falciform ligament patch. He was discharged and at 6 weeks an endoscopy was performed where complete healing was shown [7].

In 2014, Mahajan and collaborators presented a 21-year-old male who

presented to the emergency department for intense abdominal pain in the right lower quadrant, vomiting, and an 8-hour evolution fever. A physical examination displayed rebound abdominal tenderness and laboratory examination was relevant for leukocytosis. An abdominal and a pelvic CT scan was performed, revealing predominantly right perirenal pneumo-peritoneum, later a duodenal perforation was diagnosed and it was decided to perform a primary closure with an omentum patch laparoscopically [8].

Perforation of an anterior duodenal ulcer allows for free communication of duodenal and gastric contents into the peritoneal cavity. These contents will collect in the right lower quadrant. As time passes, this can progress to focal tenderness, as in this case, or to generalized peritonitis. Initial imaging other than CT may demonstrate free fluid around a normal appendix on ultrasound and free air around the kidney, or “veiled kidney sign” on abdominal radiographs [9].

5. Conclusion

Valentino’s syndrome or Valentino’s appendicitis is a rare cause of abdominal pain. Past medical history is essential in the preoperative workup in patients presenting with this symptom. Intraoperative findings of inflammation around the appendix as well as the presence of pericecal fluid should aware the treating surgeon to look after a primary cause of the reactive inflammatory process. Treatment of the underlying cause (such as presented above) will be determinant to avoid complications and unnecessary additional surgical interventions. Endoscopic follow up should prevent recurrent episodes.

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