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Case Report

A Case of Valentino's Syndrome Presenting as Possible Appendicitis

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Introduction: We present a case of a 24-year-old female who presented with the signs and symptoms of acute appendicitis.

Case report: When computed tomography and ultrasound were not definitive for the diagnosis, the decision was made to perform a laparoscopic appendectomy. The appendix showed no gross signs of inflammation, so intraoperative esophagogastroduodenoscopy was used to examine for a perforated peptic ulcer. When no perforations were found, exploratory laparotomy was performed and revealed purulent fluid in the right colic gutter and a pinhole perforation in the first part of the duodenum. The defect was repaired and the abdominal space was washed thoroughly and closed. The patient recovered well and was discharged from the hospital in good health.

Conclusion: Valentino's syndrome is an uncommon cause of right lower quadrant pain and symptoms mimicking acute appendicitis.

One of the most common causes of right lower quadrant (RLQ) abdominal pain is acute appendicitis.[1] The most frequent symptoms observed are periumbilical pain that radiates to the right lower quadrant, anorexia, nausea, and vomiting.[2] Other conditions that mimic acute appendicitis at presentation include ovarian torsion, ruptured ectopic pregnancy, pseudomembranous colitis, and perforated cholecystitis. Here, we present a unique case of Valentino's syndrome, wherein a perforated duodenal ulcer manifested the same constellation of symptoms as acute appendicitis.

Case Report

The patient was a 24-year-old female who presented to the emergency department complaining of loss of appetite and nausea with sudden onset cramping in the mid-abdomen that worsened to sharp, constant, non-radiating pain with intermittent episodes of more intense stabbing pain in the RLQ. She denied recent travel, sick contacts, and ingestion of suspicious foods. Her last known menstrual period was 15 days prior to presentation and she denied any history of sexually transmitted infection or vaginal discharge. She denied

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any family history of cancers or gastrointestinal disorders. She also reported no known allergies, occasional ethanol use, and denied tobacco and recreational drug use. Her medications at presentation included amphetamine and dextroamphetamine (Adderall, 10 mg) and ibuprofen, 600 mg/d. Physical exam revealed a soft, non-distended abdomen with tenderness to palpation and diffuse tenderness in the RLQ, not specific to McBurney's point. The obturator, Rovsing, and Murphy's signs were all negative. Complete blood count showed increased white blood cell (11.1k cells/μL), granulocyte (7.4%), and monocyte (0.6k cells/μL) count. UA was within normal limits and urine hCG was negative. At that time the initial differential diagnosis was acute appendicitis versus mittelschmerz versus ovarian cyst, and imaging was ordered for further analysis.

Computed tomography scan of the abdomen was inconclusive—the appendix was in retrograde orientation and could not be visualized, so appendicitis could not be ruled out. Transvaginal ultrasound revealed a left ovarian cyst and free fluid within the cul-de-sac and RLQ of the abdomen, but the appendix could not be visualized. At this point the patient was admitted for resuscitation, pain control, and serial abdominal examinations. The following morning, labs were obtained and the patient then had a white blood cell count that was increased to 16k cells/μL. With the additional appearance of lower abdominal peritoneal signs, the decision was made to operate.

Later that day, the patient was taken to the operating room where she initially underwent exploratory laparoscopy, which revealed a normal appendix and cloudy fluid in the right colic gutter and phlegmonic changes around the duodenum and gallbladder. Esophagogastroduodenoscopy was then performed and showed some blood in the area surrounding the pylorus but no discrete ulcer. After laparoscopic appendectomy to prevent future confusion, the procedure was converted to an upper abdominal mini-laparotomy to better visualize the stomach and proximal duodenum. The stomach was grasped with the surgeon's fingers and pulled anteriorly, revealing a pinhole perforation in the first part of the duodenum. The entire stomach was then visualized and no other injury was found, so a nasogastric tube was placed and the gastric contents suctioned out. The perforation was oversewn with interrupted 3-0 silk sutures and an omental (Graham) patch was then applied to cover the perforation site. The abdominal cavity was copiously irrigated, Seprafilm was then placed, and the abdomen was closed. The patient had an uneventful recovery, and was discharged on the third postoperative day with plans for proton pump inhibitor therapy for 6 weeks.

Discussion

Valentino's syndrome, named for the popular silent film actor Rudolph Valentino, was first described after he developed the signs and symptoms of appendicitis and underwent an appendectomy that failed to relieve his symptoms. He later developed overt peritonitis and developed multi-organ failure, to which he later succumbed. During his autopsy, it was discovered that he had been suffering from a perforated peptic ulcer.[3]

After perforation of the duodenal ulcer, inflammatory fluid and alimentary tract contents seeped into the abdomen and trickled down the right colic gutter. As the purulent fluid remained in the abdomen, it caused peritonitis and referred pain from the same general area as the appendix, leading to the development of signs and symptoms mimicking acute appendicitis. Although the ulcer was not visualized endoscopically, vigilant gross examination of the duodenum led to identification of a pinhole perforation and diagnosis of Valentino's syndrome. Thus, careful attention to alternative causes of acute right lower quadrant pain is critical in the workup of acute abdomen, both preoperatively and intraoperatively.

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References

1. Williams GR. Presidential Address: a history of appendicitis. With anecdotes illustrating its importance. *Ann Surg* 1983; **197**(5):495–506
2. Yeh B. Evidence-based emergency medicine/rational clinical examination abstract. Does this adult patient have appendicitis?. *Ann Emerg Med* 2008;**52**(3):301–303
3. Wijegoonewardene SI, Stein J, Cooke D, Tien A. Valentino's syndrome a perforated peptic ulcer mimicking acute appendicitis. *BMJ Case Rep* 2012;2012