Rare disease

Valentino's syndrome a perforated peptic ulcer mimicking acute appendicitis

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Correspondence to Dr Sandeep Indika Wijegoonewardene, indika1000@gmail.com**Summary**

The authors present a case of a 30-year-old female who presented with symptoms and signs suggestive of appendicitis accompanied by elevated inflammatory markers. The patient was consented and taken to theatre for laparoscopic appendectomy. At operation, the appendix was found to be normal but with surrounding turbid fluid in the right paracolic gutter and subhepatic space. On further inspection, a perforated pre pyloric ulcer was discovered. This was managed laparoscopically with a peritoneal lavage and falciform ligament patch repair. The patient made a good recovery and was discharged 2 days later. At 6 week follow-up the patient had an upper gastrointestinal (GI) endoscopy which showed complete healing of the ulcer. At 6 week follow-up the patient had an upper GI endoscopy which showed complete healing of the ulcer.

BACKGROUND

Right lower quadrant pain is a common emergency department presentation. Acute appendicitis is a common cause of right lower quadrant pain, however a broad-spectrum of common and uncommon pathologies may mimic acute appendicitis and present a diagnostic challenge to the clinician.^{1 2}

Less common conditions that may mimic an acute appendicitis include perforated peptic ulcer, mucocele of appendix, ruptured ectopic pregnancy, ovarian torsion, endometriosis, infarcted uterine leiomyoma, pseudomembranous colitis, perforated cholecystitis, pancreatitis, diverticulitis and torted appendix epiploica.

CASE PRESENTATION

A 30-year-old female presented to her GP for removal of an intrauterine contraceptive device. Four hours postprocedure she re-presented to her GP with sudden onset right iliac fossa pain, which was constant and worse on movement. She was referred to the emergency department with a provisional diagnosis of appendicitis.

The patient denied taking any regular medication, including non-steroidal anti-inflammatory drugs, and had no other significant medical history. Clinically, her vitals were unremarkable but she had localised right iliac fossa tenderness with guarding. Her abdomen was otherwise soft with normal bowel sounds present.

INVESTIGATIONS

Initial blood tests revealed a C reactive protein of 130, white cell count of 13.3, β human chorionic gonadotropin <5 and urinary nitrites positive on bedside testing. The clinical presentation was equivocal and she was admitted for observation and serial examination.

An abdominal ultrasound was performed, which did not visualise the appendix, however it noted a small amount of free fluid in the right iliac fossa and pelvis. No other abnormality was noted.

Serial abdominal examinations over 12 h revealed worsening right iliac fossa tenderness and a diagnosis of acute appendicitis was thought to be most likely. She was then consented, and taken to theatre for a laparoscopic appendectomy.

DIFFERENTIAL DIAGNOSIS

Initial: complication of intrauterine contraceptive devices removal, urinary tract infection, acute appendicitis, urinary tract infection excluded after formal urine testing.

Figure 1 Normal appendix with surrounding turbid fluid.

Figure 2 Right ovary and uterus with surrounding pus.

Figure 3 RIF turbid pus collection.

Figure 4 Sub hepatic pus collection.

Figure 5 Prepyloric ulcer.

TREATMENT

Under general anaesthesia a laparoscopy was performed. Laparoscopy found an appendix of normal appearance but surrounded by turbid fluid within the right iliac fossa, right paracolic gutter and around the right border of the liver and gall bladder.

Further laparoscopic evaluation revealed a 0.5 cm anterior prepyloric ulcer. The turbid fluid was sent for culture and washout performed.

The prepyloric ulcer was repaired by mobilising the overlying falciform ligament and using it to patch the ulcer. A low-pressure suction drain was placed in the right paracolic gutter and a drain without suction over the repaired ulcer and the incisions were closed.

Postoperatively, the patient was commenced on intravenous proton pump inhibitors and empirical treatment for *Helicobacter pylori* eradication (figures 1–5).

Figure 6 (A, B) Postop endoscopy pylorus at 6 weeks complete healing noted.

Helicobacter serology subsequently revealed a quantitative IgG of 86.7 μ /ml (<10 negative, >10 positive).

OUTCOME AND FOLLOW-UP

The patient was discharged 3 days postop after making an unremarkable recovery. She was discharged on a full course of *H pylori* eradication therapy and proton pump inhibitors. An outpatient upper gastrointestinal endoscopy 6 weeks post-operatively showed complete healing of the ulcer (figure 6).

DISCUSSION

The eponymous condition known, as Valentino's appendicitis was first described when Rudolph Valentino a famous American actor presented with the signs and symptoms of acute appendicitis to the Polyclinic in New York city. He had an appendectomy but later went on to develop overt peritonitis, multi-organ failure and later died.

Autopsy went on to reveal he had been suffering from a perforated gastric ulcer. Right iliac fossa pain is a common cause of presentation of patients to the emergency department and the case as seen by us goes on to highlight that other disease processes can mimic appendicitis.

Contaminants from the perforated peptic ulcer had trickled down the right paracolic gutter to the right iliac fossa causing the localised peritonism in the right iliac fossa, the presence of suppurative fluid and a mildly inflamed appendix (chemical periappendicitis) should prompt searching for other pathologies that may lead to this clinical picture thus averting disastrous consequences.^{1–4}

A literature search on reports of cases of Valentino's appendicitis was conducted in Cochrane database, Medline and Google Scholar.

Only two such cases of Valentino's syndrome have been reported in recent times where one of the patients was treated conservatively with antibiotics and the other with laparoscopy.^{5 6}

Learning points

- ▶ Many disease processes can masquerade as acute appendicitis.
- ▶ A high index of suspicion should be maintained when assessing acute abdominal pain.
- ▶ Laparoscopic exploration is an useful tool for surgical management of acute abdominal pain where the cause is elusive.
- ▶ Laparoscopy for the treatment of appendicitis is the optimal approach.

Competing interests None.

Patient consent Obtained.

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