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Case Report

Valentino's syndrome: a formidably deceptive tale of peptic ulcer

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ABSTRACT

The incidence of peptic ulcer disease (PUD) has steadily declined with the advent of H2 blockers and proton pump inhibitors (PPIs). The combined use of PPIs and endoscopic treatment has further decreased the need for emergency surgeries. Perforated ulcers are a rare cause of abdominal pain, and may not even be considered when the patient presents with right lower quadrant (RLQ) pain. In this article we report a case of 50-year lady, who presented with symptoms and signs of appendicitis accompanied by elevated inflammatory markers. Proper history taking, explicit knowledge regarding differentials, accurate radiological diagnosis and skilful surgical repair is paramount in its management and to prevent morbidity and mortality.

Keywords: PUD, Perforation, Appendicitis, Valentino, RLQ

INTRODUCTION

Peptic ulcers are focal defects in the gastric or duodenal mucosa that extend into the submucosa or deeper, caused by an imbalance between mucosal defences and acid injury. In the developed countries the prevalence rate is 4% with about 20% of patients having asymptomatic ulcers.[1,2] In developing countries, the prevalence rate is much higher with 17.2% of which more than 70% of these patients were asymptomatic.[3,4]

Risk factors for development of complications and their recurrence are NSAID and/or acetylsalicylic acid use, *H. pylori* infection, and ulcer size ≥1 cm.[5]

Complications of PUD includes bleeding, perforation, and obstruction; vary depending on the geographic location, with bleeding being the most common in Western world, whereas obstruction being more common in other parts of the world. There has been a significant downward trend in the incidence of these complications with the advent of H2 blockers and PPIs. The combined use of PPIs and endoscopic treatment has further decreased the need for emergency surgeries. Perforation is associated with high mortality at 10.6%.[6]

The fluid that originates from the perforated ulcer moves through the right paracolic gutter to the right iliac fossa and causes irritation of the peritoneum and even chemical peri-appendicitis, thereby imitating acute appendicitis. This condition is known as Valentino's syndrome, named after Rudolph Valentino, an Italian actor who died with perforated peptic ulcer.[6,7]

We report this case to highlight the need for proper history taking and to have an explicit knowledge of the differential diagnosis.

CASE REPORT

A 50-year lady presented to emergency with complaints of pain abdomen and fever with chills for the past 4 days. Pain was sudden in onset, gradually progressive, initially in epigastric region, radiated to the right iliac fossa and to back; associated with vomiting- multiple episodes with food as the content. no aggravating and relieving factor.

Fever was high grade, intermittent type associated with chills, subsided on medication. No similar complaints in the past. K/c/o hypertension and on regular medication. No h/o previous surgeries.

On examination: Patient vitals: PR-100/min, BP-100/60 mmHg, temp-100 ^{0}F; CVS-S_1S_2 heard, RS-B/L air entry present, P/A-Soft, distention present, tenderness in epigastrium and right iliac fossa, localised guarding +, no rigidity, bowel sound sluggish. Laboratory investigation revealed neutrophilic leukocytosis. Her Alvarado score was 9 out of 10, and was clinically suspected to be acute appendicitis.

X ray erect abdomen showed absence of intraperitoneal free air and air fluid levels (Figure 1).

Figure 1: X ray erect abdomen showing absence of intraperitoneal free air and air fluid levels.

USG abdomen revealed right mild hydronephrosis, loculated anechoic collection in pelvis and appendix was not visualised.

CT abdomen with contrast showed "Multiple loculated fluid collections with minimal peripheral wall enhancement, largest of this collection measures 6×4 cm in the right subhepatic region. Few of these collections shows air pockets within suggestive of abscesses (Figure 2). Appendix shows mild inflamed enhancing wall with the tip leading into the right subhepatic collection. Multiple fluid distended dilated small bowel loops with diffuse inflammatory fat stranding. Right moderate hydronephrosis with proximal mid hydroureter with tapering at the level of iliac vessel crossing. However, no evidence of ureteric calculus. Mild left pleural effusion with basal atelectasis". Findings were suggestive of peritonitis likely due to appendicular perforation.

Figure 2: Arrow indicating abscess in RIF.

Patient was intervened with IV cannulation, Foley catheterization and a naso-gastric tube insertion. Initial antibiotic treatment employed were cefoperazone/sulbactam and metronidazole. After preanesthetic evaluation and adequate fluid resuscitation patient was taken up for surgery. Despite the fact that acute appendicitis seemed to be the most likely diagnosis, in view of multiple collections exploratory laparotomy was performed. During the operation, the appendix had no signs of inflammation and free intraperitoneal fluid was found in the pelvis, inter bowel, right paracolic gutter, right iliac fossa (Figure 3), subdiaphragmatic and sub hepatic spaces with thick pus flakes on liver, stomach, small bowel and colon. An extensive Kocher manoeuvre was performed and a perforation of a duodenal ulcer (Figure 4) was found along with a small amount of fluid in the retroperitoneal cavity. Intermittent closure of perforation with monofilament absorbable size 3-0 suture was applied and the sutures were tied over omental pedicle to secure it in place. Retrograde appendectomy was performed and two abdominal drains were placed in subhepatic and pelvic region respectively.

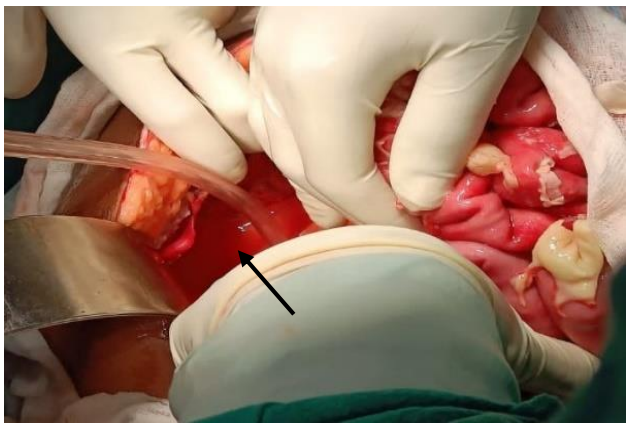

Figure 3: Arrow indicating the collection in RIF.

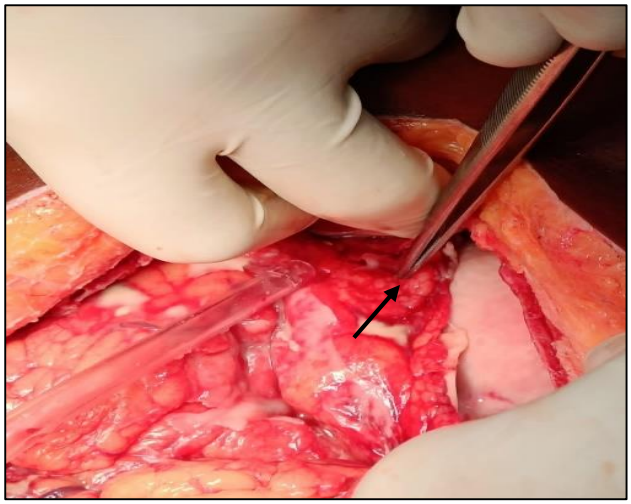

Figure 4: Arrow marking the site of perforation.

Ryle's tube removed on post op day 2, foley's catheter and abdominal drains were removed on post op day 4. Patient managed with IV fluids, analgesics and antibiotics and other supportive measures. Pus for culture and sensitivity showed no growth. HPE showed mildly inflamed appendix. Patient's postoperative period uneventful, discharged on post op day 7. Upper GI endoscopy after 6 weeks revealed healed ulcers.

DISCUSSION

Patients may present with bleeding, perforation, or obstruction. About 2/3rd of operations for complicated PUD required are because of bleeding and approximately 1/3rd is because of perforations.[8]

The main objectives of operation in these cases are to- First deal with the complication that necessitated the surgical intervention, Reduce the risk of recurrence, minimize long-term effects on the gastrointestinal tract and establish the *H. pylori* status of the patient.[9]

Perforated peptic ulcers are surgically repaired with either Graham's patch/ modified Graham's patch repair (Figure 5 and 6), which as employed in management of our case.

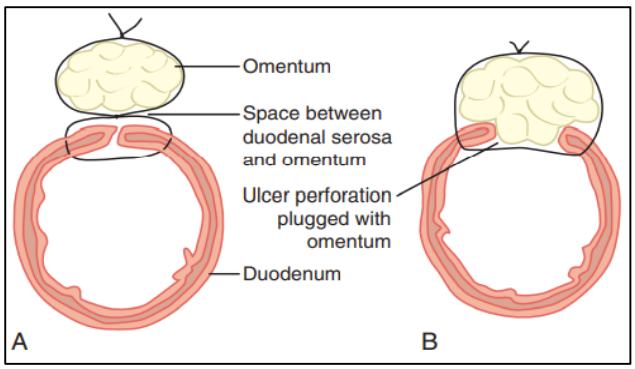

Figure 5 (A and B): Graham's patch repair and modified Graham's patch repair.

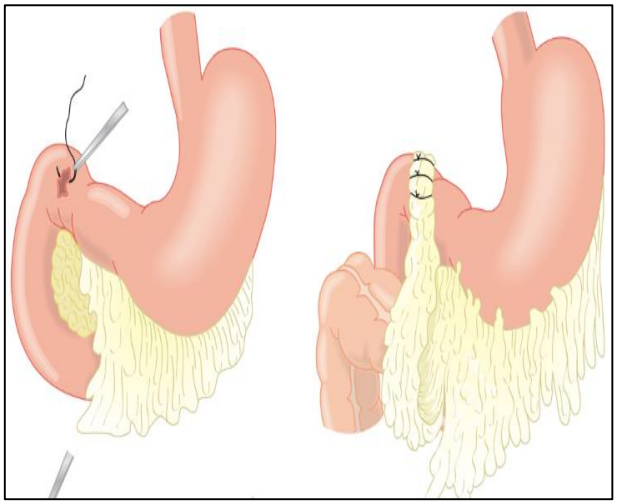

Figure 6: Modified Graham's patch repair of perforation.

CONCLUSION

This case highlights a rare presentation of a perforated duodenal ulcer that presented with RLQ pain, which has been described as Valentino's syndrome. It occurs when gastric or duodenal fluids collect in the right paracolic gutter causing focal peritonitis and RLQ pain and mimics that of appendicitis.

This case highlights that perforated ulcers, while an uncommon cause of RLQ pain, must remain on the differential of any patient who have an abdominal examination finding consistent with peritonitis.

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Ethical approval: Not required

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