

## A RARE CASE OF VALENTINO SYNDROME- CASE REPORT

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### Abstract

**Background:** Valentino's syndrome refers to acute abdomen with clinical presentation mimicking acute appendicitis in a Perforated gastric or duodenal ulcer. This occurs when suppurative fluid from duodenal perforation trickles down the paracolic gutter to the right iliac fossa causing peritonitis locally and causes periappendicitis. Less than 50 cases have been reported in literature of the same.

**Case report and discussion:** A 42-year-old male was admitted to the general surgery department with pain in the right iliac fossa and epigastric region. A diagnostic laparoscopy was performed under the suspicion of Acute appendicitis, which was later converted to open laparotomy on finding a perforated duodenal ulcer.

**Review of Literature:** Valentino syndrome is a rare condition in which a duodenal ulcer mimics acute appendicitis which is a diagnosed intraoperatively and managed surgically.

Although the exact incidence is unknown, less than 50 cases have been reported worldwide. The first incidence reports back to 1926 when an Italian actor, Rodolfo Valentino who succumbed to this rare disease and it was named after him.

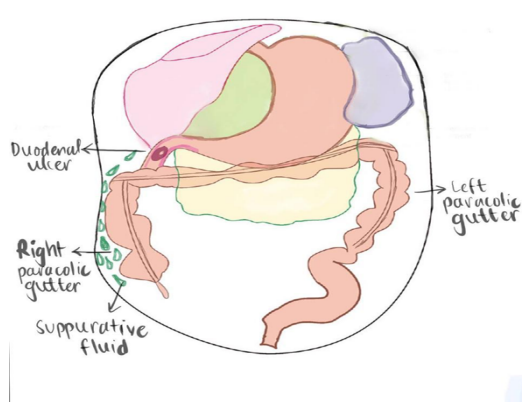
**Conclusion:** Differential diagnosis of duodenal ulcer perforation should be considered for adult patient with diagnosis of acute appendicitis. X ray erect abdomen and diagnostic laparoscopy can help to overcome foot in mouth situation due to missed duodenal ulcer perforation.

**Keywords:** Valentino syndrome.

### Introduction:

Acute appendicitis is the most common cause of right lower quadrant pain. Other causes include ureteric colic, diverticulitis, mucocele of appendix, perforated cholecystitis, pancreatitis and more[1]. Perforation of duodenum is a serious complication of peptic ulcer which clinically presents as Acute appendicitis and maybe misdiagnosed. This rare occurrence is known as Valentino syndrome, where suppurative fluid gets collected in the paracolic gutter, causing inflammation of the surrounding

peritoneum giving rise to pain and tenderness mimicking appendicitis. Perforated peptic ulcer is a surgical emergency which may lead to internal bleeding, sepsis, multi-organ failure and overall increased mortality and morbidity, if not diagnosed and treated promptly. Less than 50 cases have been reported in literature of the same.[2] Hereby we present a rare case of perforated duodenal ulcer which presents as acute appendicitis.

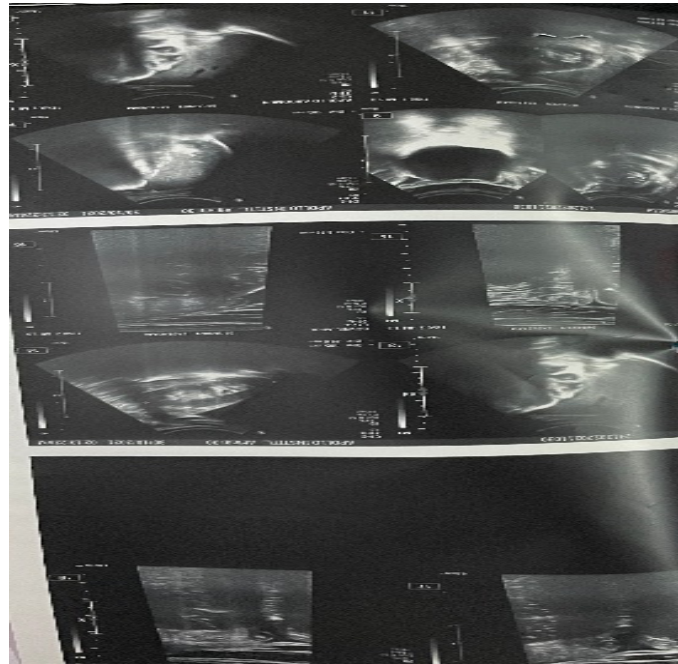


**Figure 1.1:**

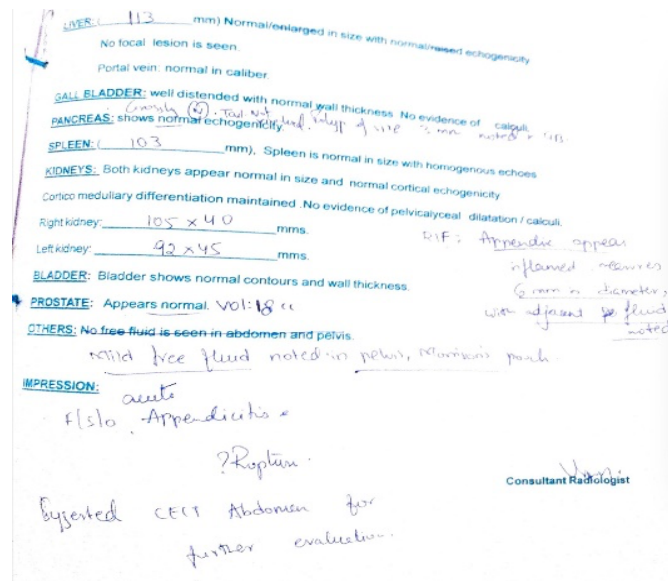
**Case Report**

A 42-year-old male patient admitted from the emergency department with chief complaints of pain in the right iliac fossa since 4 hours and has 1 episode of vomiting, and fever. The pain was sharp, sudden in onset and worsened on sudden movement. His Alvarado score was 8. The patient had complained of no such history in the past. The patient is a known alcoholic. The patient has 2 pack-year history of smoking. The patient was taking NSAIDs for intermittent pain in abdomen for the past 5 years. The

patient consumes a mixed diet, had adequate sleep, and had normal bowel and bladder movements. On physical examination, there was localized guarding and tenderness was elicited in the right iliac fossa and epigastric region, signs of ascites were present. Based on clinical findings, acute appendicitis was suspected. On USG abdomen the Right iliac fossa showed an inflamed appendix measuring 6mm in diameter with the presence of mild to moderate ascites. (Fig 1.2,1.3). Sub diaphragmatic gas was absent on chest radiograph.(Fig 1.4) (Fig 1.5).



**Fig. 1.2 USG Abdomen**



**Fig 1.3: USG Report**

Laboratory findings were all within the normal range. The patient was subjected to a routine surgical profile and planned for laparoscopic appendectomy. On diagnostic laparoscopy, the right iliac fossa was examined and 500 mL of fluid was seen collected in the right paracolic gutter with no signs of inflammation of the appendix. The fluid was green in color indicating it to be bile stained which hinted it to be due to an upper GI perforation. The laparoscope was reinserted into the epigastric region and a perforated ulcer was visualized in the first part of the duodenum. It was diagnosed to be a case of duodenal ulcer perforation. Laparoscopy was converted to laparotomy. Open Graham's

patch repair was done for the perforation with a midline incision. (Fig 1.6) The fluid was sent for culture and sensitivity and edges of the ulcer were sent for biopsy after freshening. The Post-op period was uneventful with IV fluids, analgesics, antibiotics, proton pump inhibitors with nil by mouth with Ryle's tube aspiration for 3 days. The patient's condition progressively improved over a course of 5 days and was started on a soft diet followed by a normal diet and discharged on 10th post operative day in a stable condition. Histopathological examination showed features consistent with duodenal ulcer with perforation showing acute serositis (Fig 1.7)

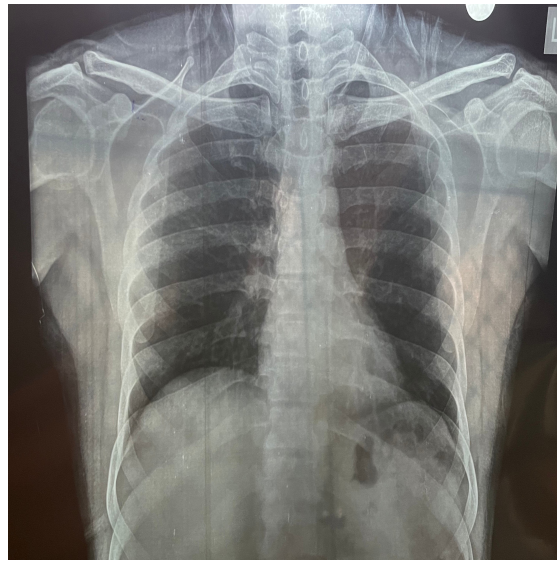
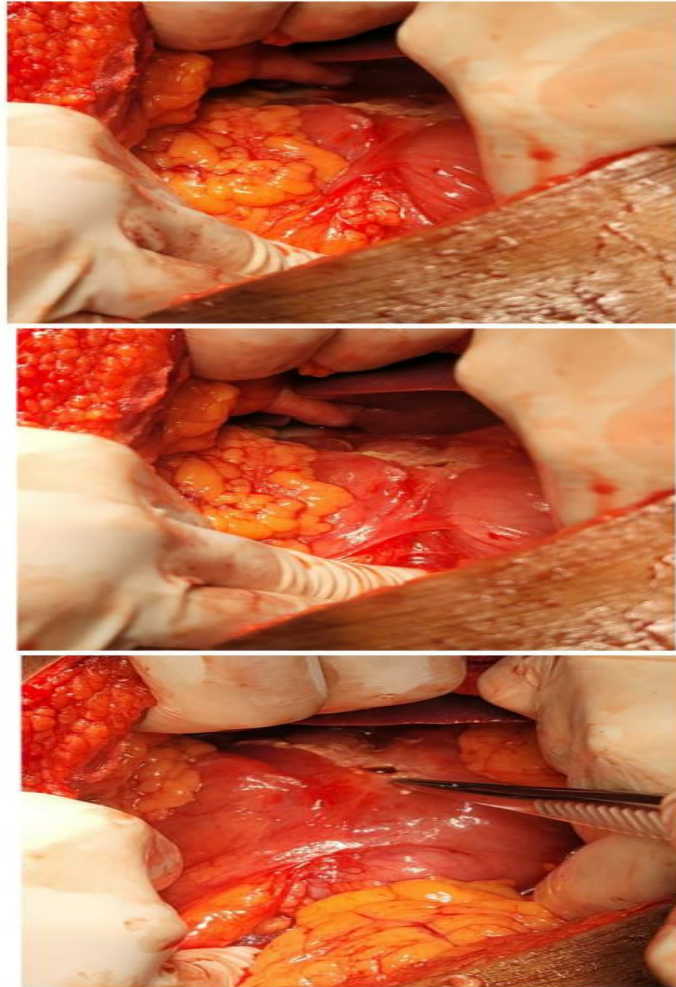


Fig 1.4: Radiograph Chest



Fig 1.5: Erect Abdominal radiograph



**Fig 1.6: Intraoperative Imaging**

<b>Specimen Received</b>	: Duodenal ulcer edge biopsy.
<b>Clinical History</b>	: Pain abdomen since two days. Perforation peritonitis.
<b>Macroscopic Exam</b>	: Received two soft tissue bits, each measuring 0.5 x 0.3 x 0.2 cm and 0.5 x 0.2 x 0.1 cm. Entire tissue is embedded.
<b>Microscopic Exam</b>	: Section shows two fragments of tissue, one of them showing duodenal mucosa with focal ulceration and perforation showing necrotic cell debris over the surface and deeper areas show fibrinous exudate with many neutrophils, few eosinophils and lymphocytes. Serosa shows neutrophilic exudate. Rest of the mucosa showing focal mild reactive atypia in the lining epithelium and lymphocytes, plasma cells and eosinophilic infiltrates in the lamina propria. Other fragment shows ulceration of mucosa with fibrinous exudate containing neutrophilic exudate and hemorrhages. Muscularis propria and subserosa shows increased vascularity, oedema, neutrophils and many eosinophils.
<b>Diagnosis</b>	: Duodenal ulcer edge biopsy:- Features are consistent with Duodenal ulcer with perforation showing Acute serositis.

**Fig 1.7: Histopathological Report**

## Discussion

Valentino's syndrome refers to acute presentation of pain in the right lower quadrant of abdomen consistent with radiological findings of Acute appendicitis, followed by an intra operative diagnosis of Perforated gastric or duodenal ulcer. This was first observed and named after a 1920s Italian actor, Rudolph Valentino. He subsequently died from an infection and organ dysfunction[3] in spite of surgery to repair the perforation.

It occurs when contaminants from the perforated peptic ulcer trickle down the right paracolic gutter to the right iliac fossa causing the localised peritonitis due to presence of suppurative fluid and a mildly inflamed appendix (chemical peri appendicitis) [4]. In the current case report, the patient had an acute abdominal pain in the RLQ with ultrasound findings raising a suspicion of Acute Appendicitis. Subsequently, a diagnostic laparoscopy was performed. On finding a normal appendix, search was made for the cause of peritonitis, which then revealed a retroperitoneal perforation of duodenal ulcer. Diagnostic laparoscopy is a useful tool for surgical management of acute abdominal pain where the cause is elusive.

Perforation of these ulcers is considered a surgical emergency with increased morbidity and mortality if the duration of the perforation exceeds 24 hours and the size is greater than 1 cm. Urgent surgical intervention to repair the duodenal perforation is the preferred treatment for Valentino's syndrome. Surgical techniques that can be used are simple closure with an omental patch after Graham technique.[5,6] Prompt open Graham's patch repair was performed in this patient, following which the patient recovered with an uneventful course and was discharged on the 10th post-operative day. Surgeons, radiologists and

physicians need to be aware about this rare presentation in order to ensure prompt preoperative diagnosis to prevent any serious complications such as peritonitis and multi organ failure from occurring.

## Conclusion:

Differential diagnosis of duodenal ulcer perforation should be considered for adult patient with diagnosis of acute appendicitis. X ray erect abdomen and diagnostic laparoscopy can help to overcome foot in mouth situation due to missed duodenal ulcer perforation.

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