

## Case Report

# A rare case of Valentino's syndrome

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### ABSTRACT

The pain in the right iliac fossa corresponds with many clinical conditions, most commonly Acute appendicitis. Rarely peptic ulcer perforation presents as pain in the right iliac fossa. This condition is called as Valentino's syndrome. This is due to the leakage of the gastric contents from the stomach or duodenum during the perforation. This induces peritonitis and sometimes the fluids get collected in the right iliac fossa causing pain, hence mimicking appendicitis. This is the case study of a 17yr old boy with right iliac fossa pain and tenderness, vomiting, fever, all corresponding to acute appendicitis. But on surgical exploration, it was found to be duodenal perforation. Valentino's syndrome is a very misleading condition which will lead to death if proper evaluation and timely management is not done. This study emphasis the fact that Valentino's syndrome has to be considered as the differential diagnosis in symptoms suggestive of acute appendicitis.

**Keywords:** Appendicitis, Peptic ulcer, Perforation, Valentino's syndrome

## INTRODUCTION

Appendicitis is the inflammation. Symptoms include right lower abdominal pain, vomiting, fever, loss of appetite.<sup>1</sup> The initial consideration in most patients with right iliac fossa pain is acute appendicitis. However, several other conditions may present with similar clinical symptoms and signs.<sup>2,3</sup>

The conditions that may mimic appendicitis include ureteric colic, mucocele of appendix, ruptured ectopic pregnancy, ovarian torsion, endometriosis, infarcted uterine leiomyoma, pseudomembranous colitis, perforated cholecystitis, pancreatitis, diverticulitis and perforated peptic ulcer.<sup>4</sup>

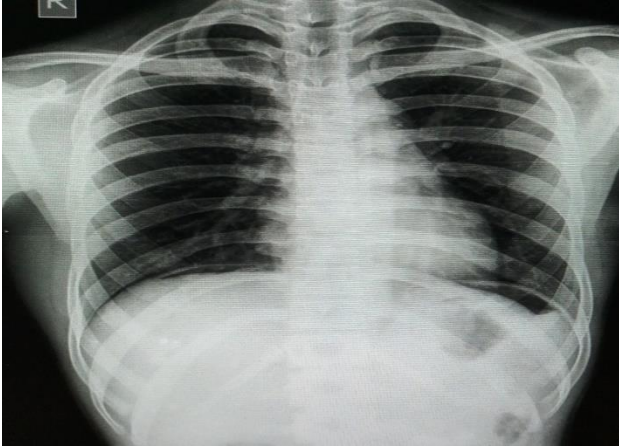
One such rare condition is the Valentino's syndrome. Valentino's syndrome occurs in peptic ulcer perforation where the gastric contents gets leaked and gets collected in the right iliac fossa leading to pain in the right lower quadrant mimicking appendicitis.<sup>5</sup>

## CASE REPORT

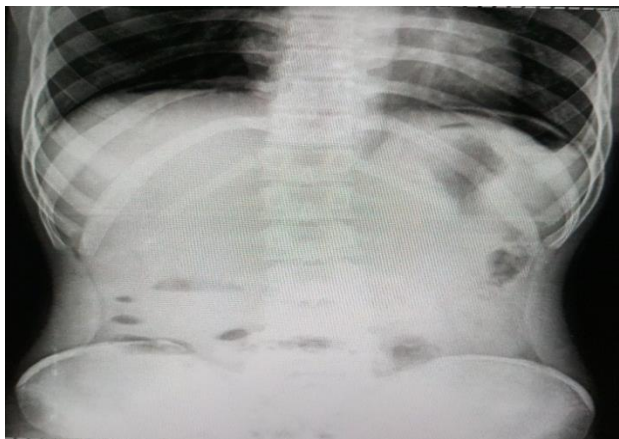
A 17yr old boy came to the emergency room with complaints of abdominal pain over right inferior quadrant for 1 day. Associated symptoms include vomiting, fever, anorexia. The patient had no previous similar complaints. He had no history of any chronic medication. He had 2 shots of intramuscular analgesic before presenting to ER. He had no history of alcohol consumption or smoking. On examination, vitals are stable and general condition normal. On examination of abdomen, abdomen was soft, tenderness was present at the right iliac fossa, rebound tenderness was present and minimal guarding was also present. Clinically empirical diagnosis was made as acute appendicitis.

Routine hemogram and other blood investigations were taken and found to have elevated leukocyte count indicating inflammation. On Ultrasonogram of the abdomen, the diagnosis of appendicitis could not be made conclusively, but presence of free fluid was noted in the

RIF and pelvis. On radiograph of the chest and abdomen, air under the diaphragm was noted (Figure 1 and Figure 2). This gave the clue of some hollow viscus perforation. On CT Abdomen, free fluid was seen inside the peritoneal cavity in right iliac fossa. But the site of the perforation was not found. After anesthetic assessment and preparation, the patient was posted for emergency laparotomy.



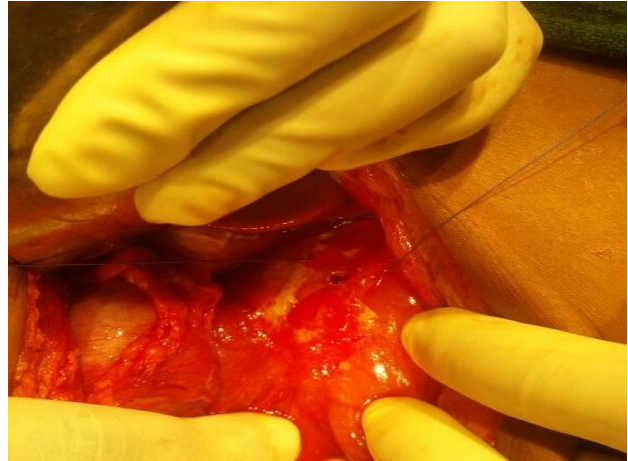
**Figure 1: Chest x-ray showing air under the diaphragm.**



**Figure 2: Abdominal x-ray showing air under the diaphragm.**

Lower midline laparotomy incision was made initially and found to have sero-purulent fluid collection in the peritoneal cavity. Appendix was localized and found to be normal without any inflammation. Then the incision was extended till xiphisternum. On careful exploration, a sealed perforation at the 1st part of duodenum was noted (Figure 3). On bowel walkthrough, no other perforation or any other pathology was noted in any part of intestine or in stomach. The perforation was closed with Graham's omental patch method and thorough peritoneal lavage was given. Post-operatively the patient was treated with intravenous antibiotics and intravenous proton pump inhibitors. The post-operative period was uneventful. The patient condition improved, was able to take normal

feeds. The patient was discharged with advice to take oral PPIs for a period of 15 days.



**Figure 3: Perforation at 1<sup>st</sup> part of duodenum.**

## DISCUSSION

Valentino's syndrome occurs due to the collection of the gastric contents in the right iliac fossa when there is gastric or duodenal perforation.<sup>6</sup> This syndrome got its name after the death of a French silent actor Rudolph Gugleilmi Valentino who was admitted in New York City polyclinic with the complaints of right lower quadrant pain. He was diagnosed clinically as acute appendicitis and was treated with emergency appendectomy. After surgery he developed overt peritonitis and died of multi-organ failure. On postmortem it was found that he had perforated gastric ulcer.<sup>5</sup>

When there is gastric or duodenal perforation, the gastric contents trickle into the peritoneal cavity. Sometimes it may pass through right para-colic gutter to get settled down in the right iliac fossa. Initially there would be diffuse or poorly localized pain over lower quadrants of the abdomen. As time proceeds, due to local irritation by the collected gastric contents, pain becomes more localized to the right iliac fossa mimicking appendicitis. In many cases, the perforation is found intra-operatively.<sup>7</sup>

Diagnosis can be confirmed with radiological evidences. Ultrasonogram may reveal free fluid collection in right iliac fossa with features of appendicitis. Abdominal radiograph may reveal air under the diaphragm indicating a hollow viscus perforation. CT abdomen may be used to locate the site of the perforation. In our case, abdominal x-ray gave the clue. Treatment is always surgical. Preferred surgery is closure of the perforation by Graham's omental patch and post-operative antibiotics, intravenous fluids and proton pump inhibitors.<sup>8</sup>

In conclusion, pain in the right iliac fossa may be due to several other reasons than appendicitis. Valentino's syndrome should be considered as one of the differential diagnosis even though it is rare. The condition may be

fatal when proper diagnosis or appropriate management is not made.

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## REFERENCES

1. Graffeo, Charles S, Counselman, Francis L. Appendicitis. Emerg Medicine Clin North Am. 1996;14(4):653-71.
2. Martin RF, Rossi RL. The acute abdomen. An overview and algorithms. Surg Clin North Am. 1997;77(6):1227-43.
3. Patel NB, Wenzke DR. Evaluating the patient with right lower quadrant pain. Radiol Clin North Am. 2015;53(6):1159-70.
4. Ripolles T, Martinez-Perez MJ, Morote V, Solaz J. Diseases that simulate acute appendicitis on ultrasound. British J Radiol. 1998 Jan;71(841):94-8.
5. Wijegoonewardene SI, Stein J, Cooke D, Tien A. Valentino's syndrome a perforated peptic ulcer mimicking acute appendicitis. BMJ Case Rep 2012;28:1-3.
6. Ramírez-Ramírez MM, Villanueva-Saenz E. Valentino's syndrome. Perforated peptic ulcer with unusual clinical presentation. Rev Gastroenterol Mex. 2016;81(4):225-6.
7. Mahajan PS, Abdalla MF, Purayil NK. First report of preoperative imaging diagnosis of a surgically confirmed case of Valentino's syndrome. J Clin Imaging Sci. 2014;4:28.
8. Prabhu V, Shivani A. An overview of history, pathogenesis and treatment of perforated peptic ulcer disease with evaluation of prognostic scoring in adults. Ann Med Health Sci Res. 2014;4(1):22-9.

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