

Chilaiditi's Syndrome Misdiagnosed as Peptic Ulcers Perforation

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Abstract

In our case presenting with complaints of sudden abdominal pain, nausea, and vomiting, abdominal tenderness and air under the diaphragm on the right were detected in direct abdominal graphy and diagnosed with peptic ulcers perforation, the patient was interned. As the clinical picture of ulcers perforation was incomplete in the follow-up, the tests were repeated and Chilaiditi could be diagnosed as the second direct graphy revealed a colon segment and haustras on the right under the diaphragm.

Keywords: Acute abdomen, Chilaiditi's syndrome, Pneumoperitoneum, Peptic ulcer

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Introduction

Chilaiditi's sign is an asymptomatic radiological finding that refers to the interposition of the colon between the liver and the diaphragm. Chilaiditi's syndrome refers to the presence of concurrent symptoms such as abdominal pain, vomiting, constipation, and respiratory distress. Our case is presented here as he presented to us as a syndrome with symptoms and the entire colon was not detected initially and assumed to be free air and thus, surgical operation was planned due to the misdiagnosis of peptic ulcers perforation.

Case Presentation

Our case is a 49-year-old male patient. He presented to our emergency clinic with complaints of sudden abdominal pain, nausea, and vomiting and abdominal tenderness in examination and air under the diaphragm on the right in direct abdominal graphy were detected (Figure 1). There was no leucocytosis. With current clinical findings, the patient was prediagnosed with peptic ulcers perforation and was interned. He was then followed-up to allow for the complete clinical picture of peptic ulcer to form. As he developed no abdominal rigidity and leucocytosis in laboratory follow-up and his ultrasonography revealed no free abdominal fluid, his direct abdominal graphy was repeated and as a result colon segment and haustras on the right under the diaphragm were observed (Figure 2), the diagnosis of Chilaiditi's syndrome replaced that of peptic ulcers perforation.

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Discussion

Approximately 10% of pneumoperitoneum cases are not associated with hollow organ perforation. There are many imitators of pneumoperitoneum including subphrenic abscess, colon volvulus, Chilaiditi syndrome, and so on [1].



Figure 1 Visualization of free air under the diaphragm on the right in the first examination.



Figure 2 Visualization of colon haustras under the diaphragm on the right in the second examination.

Chilaiditi's sign occurs in 0.1-0.25% of the population and is asymptomatic. Chilaiditi's syndrome is a very rare condition with clinical symptoms. Main symptoms include abdominal pain,

distension, nausea, vomiting, and constipation. Abdominal pain is quite severe and might be confused with acute abdominal syndrome. It may sometimes result in respiratory distress and cardiac arrhythmias. It might also resemble the picture of renal colic [2,3].

In our case, the presence of sudden abdominal pain, tenderness in abdominal examination, and air under the diaphragm, but the failure to detect the colon haustras in the first film led to a misinterpretation of Chilaiditi's syndrome as peptic ulcer.

Treatment of Chilaiditi syndrome is conservative; the symptoms are eliminated with bed rest, nasogastric decompression, soft-liquid diet, liquid replacement, and enema. Surgical intervention is rarely indicated [4,5].

Conclusions

Pneumoperitoneum is not an indicator of acute surgical abdomen. Differential diagnosis should be made. Laboratory signs is supported with clinical signs and symptoms. If the diagnosis is suspicious, the patient is taken in observation and repeated control.

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