

Chiliaditi Sendromu

Chiliaditi Syndrome

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ABSTRACT

Chiliaditi syndrome is an unusual disease usually resulted from interposition of colon, hepatic flexura or intestines to the space between liver and diaphragma. Diagnosis is usually incidental based on the chest or abdominal radiographies.

Keywords: Chiliaditi syndrome, emergency, diaphragm

ÖZET

Chiliaditi sendromu genellikle kolon, hepatik fleksura veya bağırsakların karaciğer ve diyafram arasındaki boşluktaki interpozisyonundan kaynaklanan nadir bir hastalıktır. Tanı genellikle göğüs ya da karın radyografileri dayalı tesadüfen konur.

Anahtar Sözcükler: Chiliaditi sendromu, acil, diyafragma

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INTRODUCTION

Chiliaditi syndrome is an unusual disease usually resulted from interposition of colon, hepatic flexura or intestines to the space between liver and diaphragma. Chilaiditi sign is a relatively rare finding with the prevalence in the general population ranging between 0.025% and 0.28%. The incidence usually increases with age, and it is more common in males.¹

The disease can present with abdominal pain, vomiting, constipation, intestinal obstruction, dyspnea and chest pain.² It is often asymptomatic but there were cases presented with acute pain in the abdomen mimicking renal colic, subphrenic abscess and pneumoperitonium needing corrective surgical procedure.³ Majority of cases are diagnosed incidentally. Chiliaditi syndrome is usually diagnosed by radiological examination.

CASE REPORT

A 33 year-old male was presented to our clinic with diffuse abdominal pain that started suddenly. He had been treated with interferon and ribavirin for a year due to hepatitis C infection. Physical examination revealed abdominal distention and diffuse tenderness in abdomen without defense and rebound findings. Complete blood count revealed 12.9g/dl (10-16) hemoglobine, 36.3% (33-57%) hematocrite, 253000/mm³ ((140-360/mm³) platelet levels. Biochemistry studies revealed 89 g/dl (75-115 g/dl)glucose, 16 U/L AST (5-40 U/L), 14 U/L (5-40) ALT, 75 U/L (28-100) Amylase, 30 mg/dL (10-50 mg/dL) BUN, 1.0 mg/dL (0.6-1.2 mg/dL) creatinie levels. Posteroanterior (PA) chest radiography showed elevation of right hemidiaphragma and presence of colonic haustra between hemiadiaphragma and liver (Figure 1). Whole abdomen computed tomography (CT) with oral and intravenous contrast agent administration revealed elongated and distended sigmoid colon with proximal part lying anteriorly between liver and diaphragm (Figure 2). After fluid replacement therapy, patient had no pain. Posteroanterior chest radiography obtained after pain relief revealed no colonic haustra between liver and diaphragm (Figure 3).

DISCUSSION

The hepatodiaphragmatic interposition of the intestine, either large or small, was described for the first time by Cantini in 1865. In 1910, Chiliaditi reported 3 patients with interposition of right colon between liver and right hemidiaphragm.^{4,5} The prevalence in the general population is below 0.3 % with a male-female ratio 4/1. This syndrome is seen rarely and also it is usually asymptomatic. Diagnosis is dependent on radiographies evidence and is usually incidental based on the chest or abdominal films. Most frequently seen signs are abdominal pain, distention, nausea, vomiting and constipation. Abdominal pain may be severe and mimic acute abdomen. There have also been rare cases of respiratory distress and cardiac arrhythmias. 4 In our case abdominal pain and distention existed together. Differential diagnosis includes subdiaphragmatic abscsess, posterior lesions of liver, pneumoperitoneum, retroperitoneal masses. X-ray films, ultrasonography and computed tomography aids diagnosis.6

Chilaiditi syndrome is usually managed conservatively without surgical intervention. Symptoms often respond to medical treatments such as administration of laxatives liquid food ad-



Figure 1: Air pouch due to colonic haustra is seen below right hemidiaphragma on the PA chest radiography.



Figure 2: Abdominal CT with oral and intravenous contrast administration. Colonic haustra is seen between liver and diaphragma.



Figure 3: After therapy, colonic haustra isn't seen below right hemidiaphragma on the PA chest radiography.

ministration, fluid replacement and nasogastric decompression. However, surgical treatment may be used for cases with colonic volvulus, bowel obstruction or ischemia, and persistent pain.1

CONCLUSION

Chiliaditi syndrome is an unusual disorder. Usually it is asymptomatic but in some patients it may be symptomatic and surgical treatment may be necessary. Hence Chiliaditi syndrome should be thought in differential diagnosis of abdominal pain.

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