

## CASE REPORT

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# Importance of Knowing the Chilaiditi Sign

Zohra R. Malik<sup>1\*</sup> and Zareen Razaq<sup>2</sup>

<sup>1</sup>Corresponding Author: Department of Internal Medicine, Saint John's Episcopal Hospital, New York, USA

<sup>2</sup>Lahore Medical and Dental College, Lahore, Pakistan

## ABSTRACT

Chilaiditi sign is a rare radiological finding. The knowledge of which is important to prevent unwanted procedures in patients.

## ARTICLE HISTORY

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## Introduction

Chilaiditi sign is an incidental radiological finding characterized by interposition of the colon between the right hemidiaphragm and liver. Incidence is 0.1-1% and most patients are asymptomatic. It is named after Demetrius Chilaiditi (1883-1975), Greek radiologist who described the radiographic findings in 1910 whilst working in Vienna, Austria [1].

## Case Presentation

We hereby present a case of a 50-year-old lady with a medical history significant for epilepsy, chronic obstructive pulmonary disease, bipolar disease, gastric bypass surgery and pulmonary embolism who was brought to us with complaints of fever and seizures. Vitals at presentation were: temperature 104.7 F, BP 111/67 mmHg, pulse rate 128 bpm, respiratory rate 24 rpm, oxygen saturation 95% on RA. Chest X-ray showed gaseous distention of the colon in the right upper quadrant, seen interposed between the liver and the diaphragm which raised the possibility of a possible diaphragmatic rupture/injury, pneumoperitoneum or abdominal viscera perforation. Surgery consult and emergent surgical intervention was what we had planned. The chest x-ray appeared worse than the clinical presentation of the patient. Research into the case showed that this was an incidental Chilaiditi sign. This is an uncommon presentation, but a 'must-know' radiologic finding.

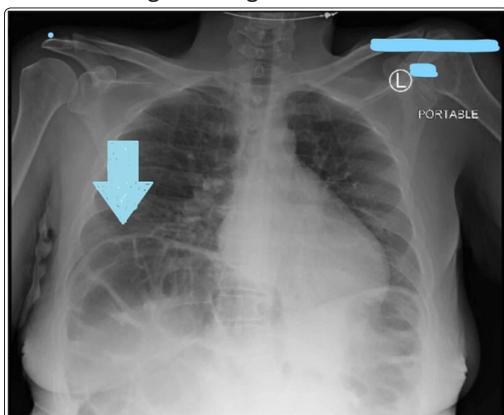


Figure 1: Chilaiditi Sign

Elevated right hemidiaphragm by the distended colon with haustral folds seen (arrow).

The salient features of Chilaiditi sign include the presence of gas between the liver and the diaphragm [figure 1]. The presence of haustrations within the gas suggest that it not free but within the bowel [arrow in figure1]. When no symptoms are present, this clinical finding is referred to as Chilaiditi's sign. In rare cases, symptoms do develop; these cases are referred to as Chilaiditi's syndrome [2]. Some of the symptoms of Chilaiditi's syndrome include volvulus, dyspepsia, nausea, vomiting, constipation, dysphagia, and tenderness in the epigastric region. In some cases, respiratory distress has also been reported [3]. Asymptomatic patients with Chilaiditi sign do not require treatment. Analgesic and fluid resuscitation should be given to those present with abdominal pain or distension. Surgical interventions like transverse colectomy or right hemicolectomy may be required in some rare cases [4].

## Conclusions

Lack of knowledge of Chilaiditi sign can lead to false positive diagnosis and unwanted interventions. Knowing the Chilaiditi sign can prevent unnecessary procedures in an asymptomatic patient.

## References

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Contact Zohra R. Malik ✉ Zohrarazaq@gmail.com 📧 Department Of Internal Medicine, Saint John's Episcopal Hospital, New York, United States.

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