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From sign to syndrome

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Contributor statement

SG conceived the idea and obtained written informed consent from the parents. CC provided the initial draft of the manuscript. All authors contributed in arriving at the final version.

Competing interests statement

None declared.

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CASE HISTORY

A 3-year-old girl attended the children's assessment unit with recurrent episodes of wheezing requiring inhaled salbutamol and a few courses of oral prednisolone. Since the age of two she had also suffered from constipation. She was prescribed laxatives in the form of macrogols and lactulose on an as and when required basis, with good response. She was born at term with no neonatal complications and no family history of note. Her clinical examination was unremarkable apart from a bilateral wheeze. Considering the history of recurrent chest infections and numerous hospital admissions, a chest radiograph was performed. This revealed the Chilaiditi sign (Fig 1).

The Chilaiditi sign is a rare, usually incidental radiographic finding characterized by colonic interposition between the liver and the diaphragm^[1]. This interposition is secondary to anatomical variations in the suspensory ligaments of the transverse colon or falciform ligament, as well as secondary to congenital or chronic liver and lung diseases^[2]. When associated with symptoms, such as abdominal pain, decreased appetite, nausea, vomiting and constipation, it is referred to as Chilaiditi syndrome. In more severe cases it can lead to respiratory distress, and rarely intestinal obstruction or pseudo-obstruction^[1, 3].

The differential diagnosis of Chilaiditi sign includes volvulus, intussusception, intestinal obstruction and inflammatory conditions, such as appendicitis, although these conditions can also occur alongside a colonic interposition^[3]. Management of Chilaiditi syndrome is usually conservative and includes bowel decompression with laxatives or enemas. Surgical intervention is only indicated if there is an evidence of bowel ischaemia.

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