Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/142573/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Ghani, Sohail, Course, Christopher W and Bodla, Hari P 2017. From sign to syndrome: Chilaiditi. Archives of Disease in Childhood 102 (12) , 1117. 10.1136/archdischild-2017-313467 file

Publishers page: <http://dx.doi.org/10.1136/archdischild-2017-313467>
<<http://dx.doi.org/10.1136/archdischild-2017-313467>>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies.

See

<http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.

From sign to syndrome

Sohail Ghani¹, Chris Course¹, Hari Bodla¹

Author affiliations:

1. Department of Paediatrics, Hywel Dda University Health Board, Glangwili General Hospital, Carmarthen

Word count: 246

Images: 1

Key words: Chilaiditi sign, Chilaiditi syndrome, intussusception, volvulus, intestinal perforation

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.

Corresponding author:

Sohail Ghani

Address for correspondence:

Dr Sohail Ghani
Consultant Paediatrician
2 Lon Y Deri
Rhiwbina,
Cardiff, CF14 6JN
United Kingdom
Email: sohailghani2001@yahoo.com

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.

REFERENCES

1. Weng, W.H., et al., *Colonic interposition between the liver and left diaphragm - management of Chilaiditi syndrome: A case report and literature review*. *Oncol Lett*, 2014. 7(5): p. 1657-1660.
2. Indiran, V., et al., *Chilaiditi sign*. *Abdom Radiol (NY)*, 2017.
3. Moaven, O. and R.A. Hodin, *Chilaiditi syndrome: a rare entity with important differential diagnoses*. *Gastroenterol Hepatol (N Y)*, 2012. 8(4): p. 276-8.