TPM Vol. 32, No. S3, 2025 ISSN: 1972-6325 https://www.tpmap.org/



# CHILADITI SYNDROME – TO OPERATE OR NOT TO OPERATE ?

# DR. SHRINIDHI B

POSTGRADUATE, DEPARTMENT OF GENERAL MEDICINE, SAVEETHA MEDICAL COLLEGE AND HOSPITALS, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA UNIVERSITY, CHENNAI, TAMIL NADU, INDIA, 602105,

## DR. PALAGIRI YOGITHA VARMA

POST GRADUATE, DEPARTMENT OF GENERAL MEDICINE, SAVEETHA MEDICAL COLLEGE AND HOSPITALS, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA UNIVERSITY, CHENNAI, TAMIL NADU, INDIA, 602105.

## DR. PREMKUMAR S

POST GRADUATE, DEPARTMENT OF GENERAL MEDICINE, SAVEETHA MEDICAL COLLEGE AND HOSPITALS, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA UNIVERSITY, CHENNAI, TAMIL NADU, INDIA, 602105.

## DR. MONIC VALENTINA J

SENIOR RESIDENT, DEPARTMENT OF GENERAL MEDICINE, SAVEETHA MEDICAL COLLEGE AND HOSPITALS, SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES, SAVEETHA UNIVERSITY, CHENNAI, TAMIL NADU, INDIA, 602105.

### Case description

A 61-year-old male patient bed ridden due to cerebro-vascular accident with dense hemiplegia 1 year ago and with residual contractures presented with complaints of intermittent abdominal discomfort, bloating, and mild dyspnea since 1 week. There was no history of recent trauma, surgery, or bowel obstruction. Physical examination was unremarkable, and vital signs were stable.

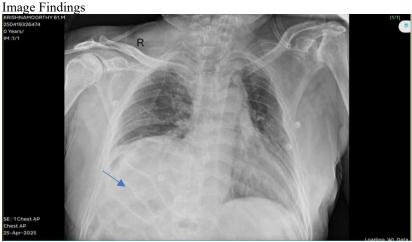


FIG. 1: CHEST X-RAY SHOWING DILATED BOWEL LOOPS UNDER RIGHT HEMIDIAPGRAGM A plain chest radiograph revealed the presence of air under the right hemidiaphragm, raising initial concern for pneumoperitoneum. However, closer evaluation showed haustral markings within the gas shadow, consistent with the presence of interposed colon between the liver and diaphragm. Subsequent contrast-enhanced CT of the abdomen confirmed the diagnosis of Chilaiditi syndrome, showing a redundant loop of transverse colon occupying the subdiaphragmatic space, without signs of obstruction, volvulus, or ischemia<sup>[1,2]</sup>.

#### DISCUSSION

Chilaiditi syndrome refers to the symptomatic form of the Chilaiditi sign, a rare anatomical variation where the colon becomes interposed between the liver and diaphragm. This condition may mimic free air under the

TPM Vol. 32, No. S3, 2025 ISSN: 1972-6325 https://www.tpmap.org/



diaphragm on imaging, potentially leading to misdiagnosis and unnecessary surgical intervention. CT is crucial in confirming the diagnosis and ruling out complications<sup>[3]</sup>.

Management

The patient was managed conservatively with bowel rest, hydration, and laxatives. Symptoms subsided within 48 hours, and no surgical intervention was required. The patient remains under observation for potential recurrence<sup>[2,4]</sup>.

#### CONCLUSION

This case highlights the importance of distinguishing Chilaiditi syndrome from pneumoperitoneum on imaging to avoid misdiagnosis. Recognition of haustral patterns on radiographs and confirmation with CT can guide appropriate management and prevent unnecessary surgical exploration<sup>[5]</sup>.

#### REFERENCES

- Nair N, Takieddine Z, Tariq H. Colonic Interposition between the Liver and Diaphragm: "The Chilaiditi Sign". Can J Gastroenterol Hepatol. 2016;2016:2174704. doi: 10.1155/2016/2174704. Epub 2016 Mar 8. PMID: 27446829; PMCID: PMC4904707.
- 2. Krzemiński S. Zespół Chilaiditi opis przypadku [Chilaiditi syndrome a case report]. Pol Merkur Lekarski. 2017 Apr 21;42(250):170-172. Polish. PMID: 28530216.
- 3. Gad MM, Al-Husseini MJ, Salahia S, Saad AM, Amin R. Chilaiditi syndrome a rare case of pneumoperitoneum in the emergency department: a case report. J Med Case Rep. 2018 Sep 16;12(1):263. doi: 10.1186/s13256-018-1804-y. PMID: 30219091; PMCID: PMC6139126.
- 4. Krzemiński S. Zespół Chilaiditi opis przypadku [Chilaiditi syndrome a case report]. Pol Merkur Lekarski. 2017 Apr 21;42(250):170-172. Polish. PMID: 28530216.
- 5. Bourakkadi Idrissi M, Dkhissi Y. Pneumoperitoneum and Chilaiditi syndrome: navigating a diagnostic conundrum. J Surg Case Rep. 2024 Feb 23;2024(2):rjae056. doi: 10.1093/jscr/rjae056. PMID: 38404449; PMCID: PMC10894680.