

Letter to Editor

Chilaiditi Syndrome: An Unusual Cause of Failed Colonoscopy

Sir,

Colonoscopy may be difficult in up to 10%–20% of the procedure.^[1] Many factors have been implicated in difficult colonoscopy, such as bowel preparation, body mass index, extensive diverticular diseases, and history of abdominal/pelvic surgery.^[2] Here, we present an unusual case where colonic intubation beyond hepatic flexure failed at two attempts, by two different expert endoscopists, in a 48-year-old male patient who presented with a history of nonspecific pain abdomen and generalized weakness. His blood hemoglobin level was 8 g/dl, and fecal occult blood test was positive. His X-ray abdomen revealed gas shadow with visible haustral folds in the right and left subphrenic space [Figure 1, left], which on computed tomography scan was interposition of colon between liver and both diaphragms [Figure 1, right]. This hepatodaphragmatic interposition of the colon is termed as Chilaiditi sign. Chilaiditi sign is usually an asymptomatic radiologic sign; however, when it is accompanied by clinical symptoms, it is called Chilaiditi syndrome (CS).^[3] The common symptoms of CS are abdominal pain, nausea, vomiting, and constipation. The complications of CS may include intestinal obstruction, volvulus, and perforation.^[3] An unsuspected CS may cause technical difficulty during colonoscopy and an increased risk of colonic perforation due to progressive entrapment of air. Therefore, it is important to identify such potentially difficult cases before the procedure so that special or alternative techniques may be adopted to avoid excessive time, needless patients' discomfort, and complications such as colonic perforation. Special modus operandi such as water exchange colonoscopy, magnetic endoscopic imaging (MEI), balloon enteroscopy, and carbon dioxide as insufflating agent may be considered in these patients. MEI is a nonradiographic technique that is capable

of producing a real-time three-dimensional image of the colonoscope configuration on a display monitor. It operates by sensing low electromagnetic field produced by a series of electromagnetic generator coils along a catheter inserted through the channel of the endoscope. It has been shown to be beneficial in reducing the duration of looping and increasing the cecal intubation rate when compared with no visualization.^[4] Although these techniques look promising, data to support their use in patients with CS are lacking.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

Ramesh Kumar, Utpal Anand¹, Rajeev Nayan Priyadarshi²

Departments of Gastroenterology, ¹Surgical Gastroenterology and

²Radiodiagnosis, All India Institute of Medical Sciences, Patna, Bihar, India

Address for correspondence: Dr. Ramesh Kumar, Department of Gastroenterology, All India Institute of Medical Sciences, Patna, Bihar, India.
E-mail: docrameshkr@gmail.com

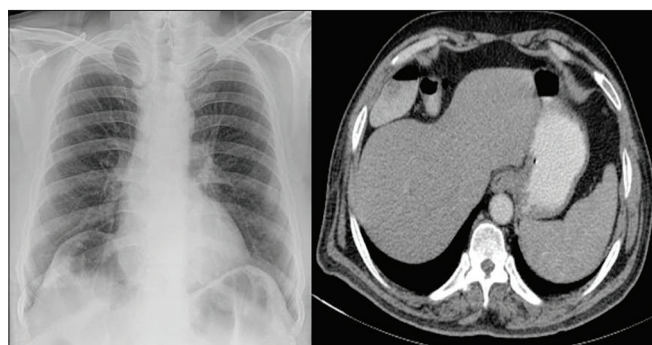


Figure 1: X-ray abdomen showing gas shadow with visible haustral folds in the right and left subphrenic space (left) and computed tomography scan showing interposition of colon between liver and both diaphragms (right)

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online

Quick Response Code:



Website: www.jdeonline.in

DOI: 10.4103/jde.JDE_50_18

How to cite this article: Kumar R, Anand U, Priyadarshi RN. Chilaiditi syndrome: An unusual cause of failed colonoscopy. *J Dig Endosc* 2019;10:XX-XX.

© 2019 Journal of Digestive Endoscopy | Published by Wolters Kluwer - Medknow

REFERENCES

1. Eickhoff A, Pickhardt PJ, Hartmann D, Riemann JF. Colon anatomy based on CT colonography and fluoroscopy: Impact on looping, straightening and ancillary manoeuvres in colonoscopy. *Dig Liver Dis* 2010;42:291-6.
2. Anderson JC, Messina CR, Cohn W, Gottfried E, Ingber S, Bernstein G. Factors predictive of difficult colonoscopy. *Gastrointest Endosc* 2001;54:558-62.
3. Moaven O, Hodin RA. Chilaiditi syndrome: A rare entity with important differential diagnoses. *Gastroenterol Hepatol (N Y)* 2012;8:276-8.
4. Shah SG, Brooker JC, Williams CB, Thapar C, Saunders BP. Effect of magnetic endoscope imaging on colonoscopy performance: A randomised controlled trial. *Lancet* 2000;356:1718-22.