THERE IS AIR UNDER DIAPHRAGM

SE NG[1], NURUL HUDA AHMAD[2], MOHAMMAD FATHULLAH ROSSMAN[3]

[1] *Emergency And Trauma Department, Hospital Selayang, Selangor, Malaysia,*

[2] *Universiti Teknologi MARA, Kampus Sungai Buloh, Selangor, Malaysia,*

[3] *Emergency And Trauma Department, Hospital Selayang, Selangor, Malaysia*

INTRODUCTION

Chilaiditi's syndrome is an uncommon condition in which a portion of the colon interposed in between liver and diaphragm. It can cause range of clinical presentation from mild abdominal pain and vomiting to severe intestinal obstruction.

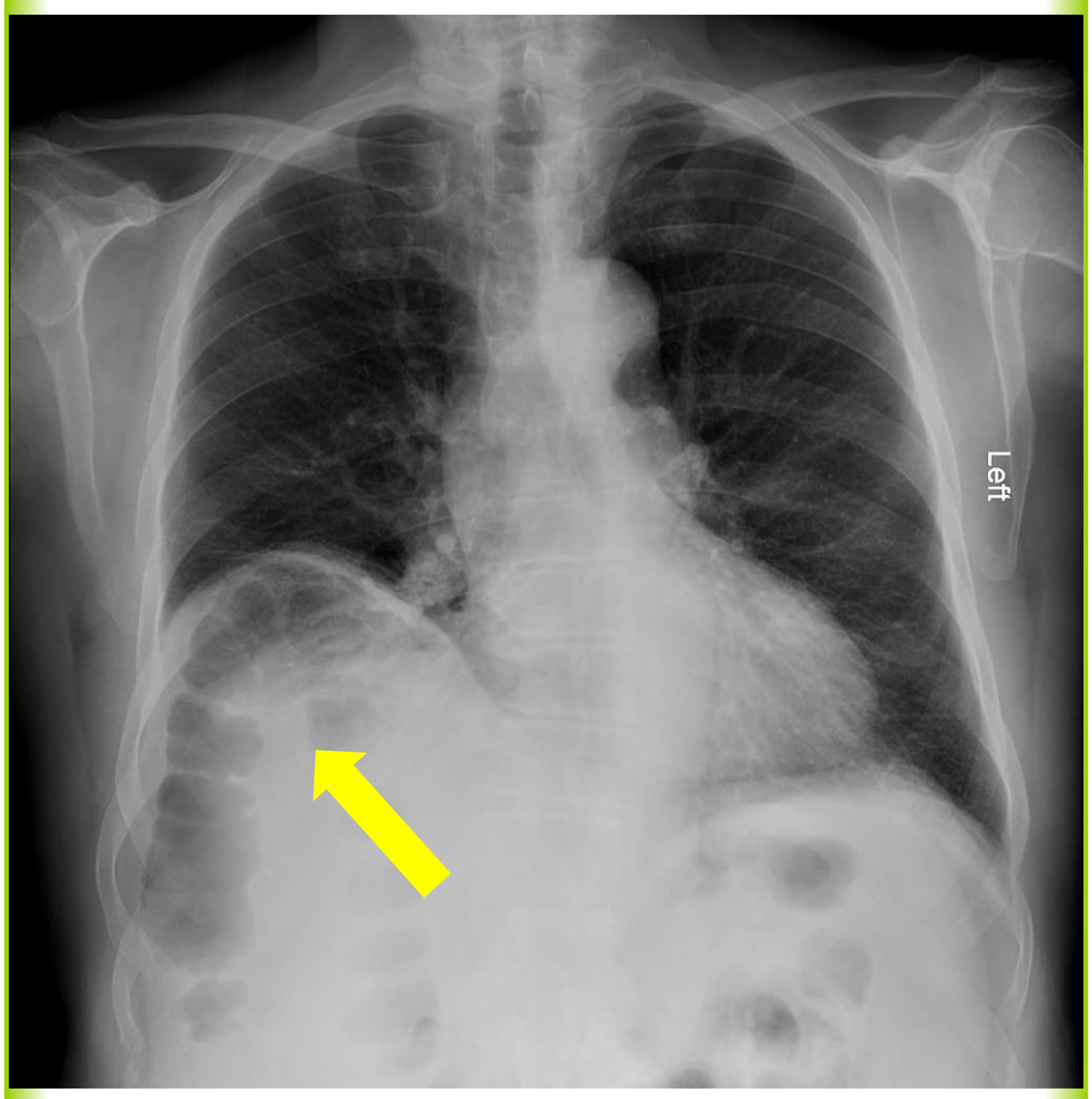
Diagnosis is made by the presence of symptoms together with radiological Chilaiditi sign. Management of this syndrome is directed towards specific symptoms in individual.

CASE PRESENTATION

A 61 years old man with underlying diabetes and hypertension presented with acute onset left sided abdominal pain associated with vomiting. He had been having difficulty passing motion with hard stool for a month. He was afebrile and had stable vital signs. Examination of abdomen was unremarkable.

Laboratory investigations were within normal range. Chest radiograph revealed gas shadow with haustral signs below right diaphragm (Chilaiditi sign).

Bowel decompression with nasogastric tube was done in which symptoms improved, evident by repeat radiograph. Colonoscopy done as outpatient showed polyp at distal transverse splenic flexure.



X-ray showed of presence of air below right diaphragm characterized by interposition of the intestine between the liver and right hemidiaphragm. (shown by the arrow)

DISCUSSION

Chilaiditi sign is defined as radiographic evidence of presence of air below right diaphragm characterized by interposition of the intestine between the liver and right hemidiaphragm[1]. This sign is found incidentally between 0.02%-0.14% of radiological studies and mostly seen in elderly[2].

Chilaiditi sign is asymptomatic and presence of symptoms renders it Chilaiditi's syndrome. Symptoms are predominantly gastrointestinal ranging from mild to severe, although presentation can vary among individual. The cause is multifactorial. Functional disorders such as chronic constipation causes colonic elongation and redundancy, thus predispose to this condition[1].

Initial approach to diagnosis should exclude life threatening conditions such as pneumoperitoneum from perforation.

Treatment of Chilaiditi's syndrome is often conservative, but 26% eventually needs surgical intervention[3].

CONCLUSION

Chilaiditi's syndrome is rare and diagnosing this condition is challenging. High degree of suspicion is crucial to avoid unnecessary surgery.

REFERENCES

1. *Moaven O & Hodin R.A. Chilaiditi syndrome: Rare entity with important differential diagnosis. Gastroenterology & hepatology. 2012; 8 (4) : 276-278*

2. *Weng WH, Liu DR, Feng CC, Que RS. Colonic interposition between liver and left diagphra-management of Chilaiditi syndrome : a case report and literature review. Oncol Lett. 2014;7:157-60*

3. *Saber AA, Boros MJ. Chilaiditi`s Syndrome: What should every surgeon know? Am Surg. 2005; 71: 261-3*