

## Peri-Caecal internal hernia: A case report and review of the literature

Gayito Adagba RA<sup>1\*</sup>; Azakpa AL<sup>1</sup>; Mar Aholou<sup>1</sup>; J Amegble<sup>1</sup>; Cp Miyanhouande<sup>1</sup>; N Gbotounou<sup>1</sup>; R Agonhou<sup>1</sup>; S Seynaeve<sup>1</sup>; L Duchnycz<sup>1</sup>; O Boissard<sup>1</sup>; M De Voghel<sup>1</sup>; A Osorio<sup>1</sup>; L Pampalone<sup>1</sup>; K Adabra<sup>1</sup>

<sup>1</sup>Visceral Surgery Departments (A And B) Of The Sylvanus Olympio Hospital And University Center, Togo.

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**\*Corresponding Author:** Gayito Adagba Rene Ayaovi, Visceral Surgery Departments (A And B) Of The Sylvanus Olympio Hospital And University Center, Togo.  
Email: [gayito\\_castro@yahoo.fr](mailto:gayito_castro@yahoo.fr)

### Abstract

Internal hernias, which are rarely discovered, represent two percent of intestinal obstructions. They may present in an acute or more progressive mode with repeated sub-occlusive episodes. The diagnosis should be made in a subject with no previous surgical history presenting an occlusive syndrome. We report a case of peri-caecal internal hernia through an inferior ileo-caecal recess in a 55 year old subject responsible for ileal strangulation with reversible ischemia.

**Keywords:** Internal hernia; Peri-caecal condition.

### Introduction

Internal hernias are defined as the protrusion of a viscera through a normal or abnormal orifice whose location is peritoneal or mesenteric. Their incidence in large autopsy series varies between 0.2 and 2%. We report here, the case of a peri-caecal internal hernia discovered in a context of intestinal obstruction.

### Observation

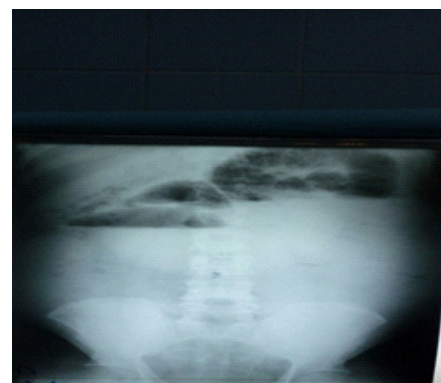
The patient was 55 years old, a poorly followed diabetic, and without surgical history. He was admitted for localized abdominal pain in the left iliac fossa with cessation of matter and gas in an apyretic context. The secondary occurrence of vomiting with the persistence of the symptoms motivated the consultation to the surgical emergencies of the CHU-SO Olympio of Lomé for management 10 days after the beginning of the symptoms.

The clinical examination at the time of admission revealed: an altered general condition, a good hemodynamic state, a flat and painful abdomen, free hernial orifices and a normal rectal exam.

The abdominal X ray (**Figure 1**) showed hydroaerotic levels larger than central highs, suggesting a small bowel obstruction.

The diagnosis of a small bowel obstruction due to a primary flange or internal hernia was evoked, and after a brief resuscitation, the patient was admitted to the operating theatre.

Under GA + IOT, after median laparotomy under the umbilical, an ileocolic distension was discovered, with a portion of the terminal ileum incarcerated (**Figure 2**) in the inferior ileo-caecal recess (**Figure 3**) realizing a peri-caecal internal hernia. A reduction of the incarcerated loop that was viable was performed followed by a closure of the recess. After parietal closure, the patient was transferred to the intensive care unit. The postoperative course was simple with resumption of transit on the second postoperative day and the patient was discharged on the seventh postoperative day.



**Figure 1:** Abdominal X Ray showing hydro-aeric levels.

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**Figure 2:** Image showing the portion of loop incarcerated in the recess.



**Figure 3:** Image showing the lower ileo-caecal recess.

## Discussion

Internal hernia is a rare pathology. Its frequency in large autopsy series is between 0.2 and 2% [1]. They can be congenital and therefore occur through a normal, para-normal or abnormal orifice. But more and more, the postoperative origin is described after orthotopic liver transplants and coelio-surgical gastro-jejunal shunts with Roux-Y loop anastomosis [2].

The peri-caecal hernia seen in our clinical case is a true hernia with a hernia sac constituted by a more or less extensive detachment of the right Toldt's fascia which normally attaches the right colon and a more or less extensive part of the cecum to the posterior parietal peritoneum. The characteristic of this hernia sac is that it develops in contact with the lateral walls of the caeco-ascending, which is thus stretched by the distended herniated loops in a latero-colic situation. It represents 13% of internal hernias [3] and is responsible for small bowel obstructions in 0.2 to 5.8% [4]. The age of onset of internal hernias according to the series by Zissin and colleagues is 38 years [5] but they can occur at any age.

The clinical picture of internal hernias is non-specific. In 5% of cases it is an acute intestinal obstruction [6]. The existence of an occlusion with a flat stomach, as was the case in our observation, would be the prerogative of hernias with a small hernial sac [7].

The preoperative diagnosis of internal hernias outside of any strangulation is rare; Bruot O and colleagues [8] reported the only case of internal hernia of the ascending caeco-colon via

Winslow's hiatus explored in colo-scanner with water in 2007 outside of any acute period.

In principle, the diagnosis of an internal hernia should be evoked in front of a picture of acute intestinal occlusion in a patient without abdomino-pelvic surgical history, which has been confirmed by abdominal CT with multi-planar reconstruction, which alone can make the positive diagnosis, the diagnosis of the mechanism and the etiological diagnosis of the hernia [9].

The evolution of internal hernias almost always leads to strangulation, hence their surgical treatment when they are diagnosed even without any symptoms [7].

In case of strangulation, the treatment consists of dislodging and treating the loop followed by closing the breach. In our case, the treatment of the loop consisted of the application of saline to the herniated portion of the loop and the observance of a spontaneous return of the staining avoided anastomotic resection. Reduction of the strangulated loop is usually easy because the neck in most cases is wide [10].

## Conclusion

Internal hernias are a rare condition whose preoperative diagnosis is often difficult to establish on clinical grounds alone, but must be evoked in front of any picture of intestinal occlusion without abdomino-pelvic surgical history.

## References

1. Blachar A, Federle MP. Internal hernia: an increasingly common cause of small bowel obstruction. *Semin Ultrasound CT MR.* 2002;23:174-83.
2. Mathieu D, Luciani A. Internal abdominal herniations. *AJR Am J Roentgenol.* 2004;183:397-404.
3. LU HC, WANG J, TSANG YM et al. Pericecal hernia: a report of two cases and survey of the literature. *Clin Radiol.* 2002;57:855-8.
4. Martin LC, Merkle EM. Review of internal hernias: radiographic and clinical findings. *AJR Am J Roentgenol.* 2006;186:703-17.
5. Zissin R, Osadchy A, Gutman V, Rathaus V, Shapiro-Feinberg M, Gayer G. CT findings in patients with small bowel obstruction due to phytobezoar. *Emerg Radiol.* 2004;10:197-200.
6. Daghfous A, Bedioui H, Baraket O, Chouaieb S, Ayadi S, Makni A, et al. Apport de l'entéroscanner dans le diagnostic pré opératoire des hernies internes : à propos de 3 cas. *La Tunisie Médicale.* 2011;89 (1):62-6.
7. Medarhri J, El Ounani J M, Rachid K, Jaafar A, Iken A, Echarrab M, El Amraoui M, et al. Hernie interne para-duodénale gauche à propos d'une nouvelle observation. *Médecine du Maghreb.* 1997;62:21-2.
8. Bruot O, Laurent V, Tissier S, Meyer-Bisch L, Barbary C, Corby S, Beot S, Régent D. Une hernie interne du caeco-colon ascendant via le hiatus de Winslow explorée en coloscanner à

l'eau. Journal de radiologie. 2007;88(3):393-6.

9. Takeyama N, Gokan T, Ohgiya Y et al. CT of internal hernias. Radiographics. 2005;25:997-1015.

10. Gibbaoui H, Arnalsteen L, Bougard V et al. Une occlusion intestinale par hernie interne à travers le hiatus de Winslow. Ann Chir. 2001;126:493-4.