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Internal Paraduodenal Hernia: A Case Report

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Abstract **Original Research Article**

Internal hernias are rare causes of acute abdominal pain and can lead to severe intestinal obstruction. We report the case of a 38-year-old female patient presenting with abdominal pain localised in the left iliac fossa (FIG) and suprapubic region, with tenderness on palpation, partially relieved by morphine. Abdominal and pelvic computed tomography (CT) with and without contrast injection ruled out renal colic and led to a diagnosis of left paraduodenal internal hernia with upstream duodenal distension. No signs of acute complications were observed.

Keywords: Herne interne paraduodenale, à propos d'un cas.

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INTRODUCTION

Internal hernias are defined as the protrusion of intestinal loops through a congenital or acquired intra-abdominal orifice, while remaining within the peritoneal cavity. They account for less than 1% of all causes of intestinal obstruction [1]. Paraduodenal hernia is the most common form of internal hernia and results from congenital abnormalities of the dorsal mesentery, creating a paraduodenal orifice through which intestinal loops can herniate [2]. Clinical diagnosis is often difficult, as the symptoms are non-specific, making imaging, particularly CT, essential for early identification and prevention of serious complications such as intestinal strangulation [3,4].

CLINICAL OBSERVATION

A 38-year-old female patient with no significant medical history presented with acute abdominal pain localised to the left iliac fossa and suprapubic region, accompanied by tenderness on palpation. The administration of morphine provided partial pain relief. No notable urological or digestive history was reported. The initial suspicion was renal colic, given the location of the pain.

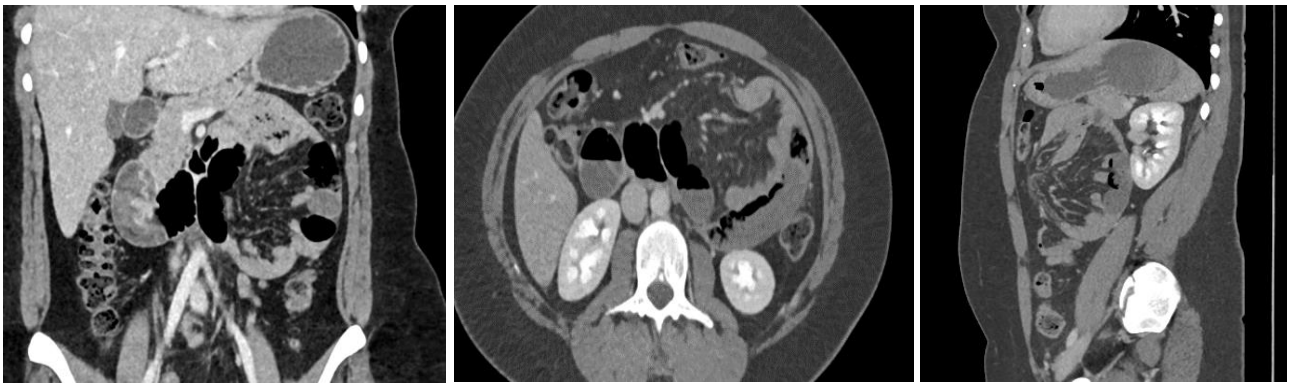

Figure 1: Left paraduodenal internal hernia with proximal duodenal distension. There is also associated infiltration of the adjacent fat.

INVESTIGATIONS

A spiral abdominal-pelvic CT scan, performed with and without iodinated contrast medium, was carried out to investigate a ureteral cause for the abdominal pain. The main findings were:

- No ureteral or pyelocaliceal dilatation.

- Left paraduodenal internal hernia with distension of the upstream duodenal loops.
- No defect in digestive wall enhancement, suggesting no ischaemic damage.
- No pneumoperitoneum or intraperitoneal effusion.

These findings confirmed the diagnosis of left paraduodenal internal hernia and ruled out the initially suspected renal colic.

DISCUSSION

Left paraduodenal hernia, or Landzert's hernia, results from the invagination of jejunal loops through an orifice located to the left of Treitz's ligament, often following a congenital anomaly of the dorsal mesentery. It is more common in young adults and carries a high risk of complications such as obstruction and strangulation [2].

The clinical presentation is variable: intermittent abdominal pain, nausea, vomiting and sometimes abdominal distension. CT scan is the gold standard examination, allowing visualisation of the mass of intestinal loops in the paraduodenal fossa, distension of the proximal loops and the absence or presence of signs of digestive distress [3,4].

Management is mainly surgical, even in the absence of acute complications, in order to prevent the risk of intestinal strangulation. Surgery can be performed by open or laparoscopic approach, with reduction of the loops and closure of the hernial orifice [5]. In our case, the absence of signs of immediate digestive distress allowed for planned surgery.

CONCLUSION

Internal paraduodenal hernia is a rare but potentially serious cause of acute abdominal pain. It should be considered in any case of non-specific abdominal pain, especially when renal colic has been ruled out. Abdominal and pelvic CT scanning is essential for early diagnosis and assessment of the risk of complications, thereby enabling appropriate surgical management to be determined.

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