Internal hernia: a rare cause of bowel obstruction

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<u>Abstract:</u> Internal hernia is a rare condition that can cause acute bowel obstruction and is often diagnosed intraoperatively. Knowledge of its clinical features may lead to early diagnosis, which in turn may improve management. Here we describe the case of a 19-year-old boy with acute intestinal obstruction due to an internal hernia. Through this case we will discuss the pathophysiology and clinical features of this hernia.

Introduction:

Internal hernia is a rare entity [1] responsible for intestinal obstruction in 0.2% of cases [2] and is often diagnosed intraoperatively. Internal hernias occur in a variety of anatomical forms. This case study will review this anomaly, highlighting its pathophysiology and clinical features.

Clinical case:

A 19-year-old man presented to the emergency department with an occlusive syndrome of vomiting and abdominal pain of 04 days' duration. Questioning revealed similar episodes which resolved spontaneously. There was no history of abdominal surgery or trauma. Physical examination confirmed the presence of an occlusive syndrome and the rest of the physical examination was normal. The patient was referred to the operating room where surgical exploration revealed the hernia with the small intestine trapped in an omental pouch (Figure 1) and the pouch was resected. Exploration of the remainder of the peritoneal cavity revealed no other abnormalities. Postoperative management was uneventful. The patient was discharged on the third day.

Discussion:

Internal herniation is a rare entity [1] responsible for bowel obstruction in 0.2% of cases [2] and is often diagnosed intraoperatively. However, the contribution of CT and MRI is considerable. A few CT diagnoses have been made [9]. These hernias usually develop silently, influenced by the peristaltic movement of the digestive tract trapped in either a normal or abnormal orifice resulting from progressive detachment of the adjacent peritoneal fascia during embryonic development [5]. In this process of herniation, the small intestine is enclosed in a peritoneal sac that corresponds to the region of detachment in hernias that develop in an abnormal orifice. In this situation they are true hernias as they form in a peritoneal hernia sac or similar structure [3-4], as in the case of our patient.

They are often observed in young patients and are characterised by the absence of a history of surgery or abdominal trauma, the very anterior topography of the distended loops, the posterior and medial displacement of the colonic segments in contact, the precise analysis of the point of convergence of the vascular axes of their mesenteric layers, which should arouse attention and may provide arguments that are sometimes decisive in locating the exact site of the "trap" and the type of internal hernia found [6,7,8]. **Conclusion:**

In conclusion, although rare, any occlusive syndrome should prompt consideration of the possibility of a strangulated internal hernia, especially in an individual with no history of surgery.

Images :



Figure1: intra-operative image showing the hernia sac

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