

Intestinal obstruction as an internal hernia in uterine broad ligaments after tubal ligation

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Abstract

Internal hernias are relatively rare and difficult to diagnose. Diagnostic delays lead to the progression of strangulation. Preoperative diagnosis of internal hernia is very rare. Early intervention and surgical correction goes a long way in preventing high morbidity and mortality associated with cases of internal hernia. Internal hernia is a rare cause of intestinal obstruction. Internal hernias represent the penetration of intestinal loops through congenital or acquired openings within the mesentery or peritoneum.

Our case was a 42 years old female with presentation of gastrointestinal obstruction, that in surgery we find internal hernia in small intestine in broad ligaments of uterine, we exclude the trapped intestine and repair the broad ligaments, and discharge her healthy.

Internal hernia of intestine, in adults, it may develop as an acquired condition resulting from abdominal injury, peritoneal inflammation, or iatrogenic factors following previous surgical procedures. Small bowel internal hernias (IHs), a rare cause of small bowel occlusion (SBO) and small bowel strangulation, while more commonly seen in young adults, can also affect elderly patients and pose a significant diagnostic challenge due to their nonspecific symptoms. In most cases, laparotomy was used to diagnose IHs. However, multidetector computed tomography (MDCT) is usually the best imaging tool to use in the emergency setting for the diagnosis of IHs

We encountered a very rare case of internal hernia in the broad ligaments of uterine.

Key Words: internal hernia; intestinal obstruction; strangulation; case report; CT scan

Introduction:

Internal hernias are relatively rare and difficult to diagnose. Diagnostic delays lead to the progression of strangulation [1]. Preoperative diagnosis of internal hernia is very rare. Early intervention and surgical correction goes a long way in preventing high morbidity and mortality associated with cases of internal hernia [2]. Internal hernia is a rare cause of intestinal obstruction [3]. An abdominal computed tomographic scan showed evidence of an intestinal obstruction at a site [4]. Internal hernias represent the penetration of intestinal loops through congenital or acquired openings within the mesentery or peritoneum [6]. IH is a rare condition with a prevalence of less than 1% in the general population and is primarily reported in children as a congenital anomaly [7]. In adults, it may develop as an acquired condition resulting from abdominal injury, peritoneal inflammation, or iatrogenic

factors following previous surgical procedures [8,9]. Data consistently show that in experienced trained hands, laparoscopic tubal sterilization is safe and highly effective regardless of the approach or occlusive method. The known mortality rate is between four and eight deaths per 100,000 cases and the rate of intraoperative and postoperative major complications is less than 1% [10].

Case presentation:

Our case was a 42 years old female with presentation of intestinal obstruction such as: nausea, vomiting, abdominal distention that admit in surgery part. We start exams and Xrays that shows Abdominal obstruction. We perform surgery with laparotomy and we find internal hernia of small intestine (figure1) We search for the points of internal hernia that we find left broad

ligament of uterine has a rupture (figure2). We exclude the intestine that shows barrow pressure on this part of intestine (figure3). We repair ruptured

broad ligaments because of previous Tubal ligation on left side. After surgery we observed her and discharge her healthy.

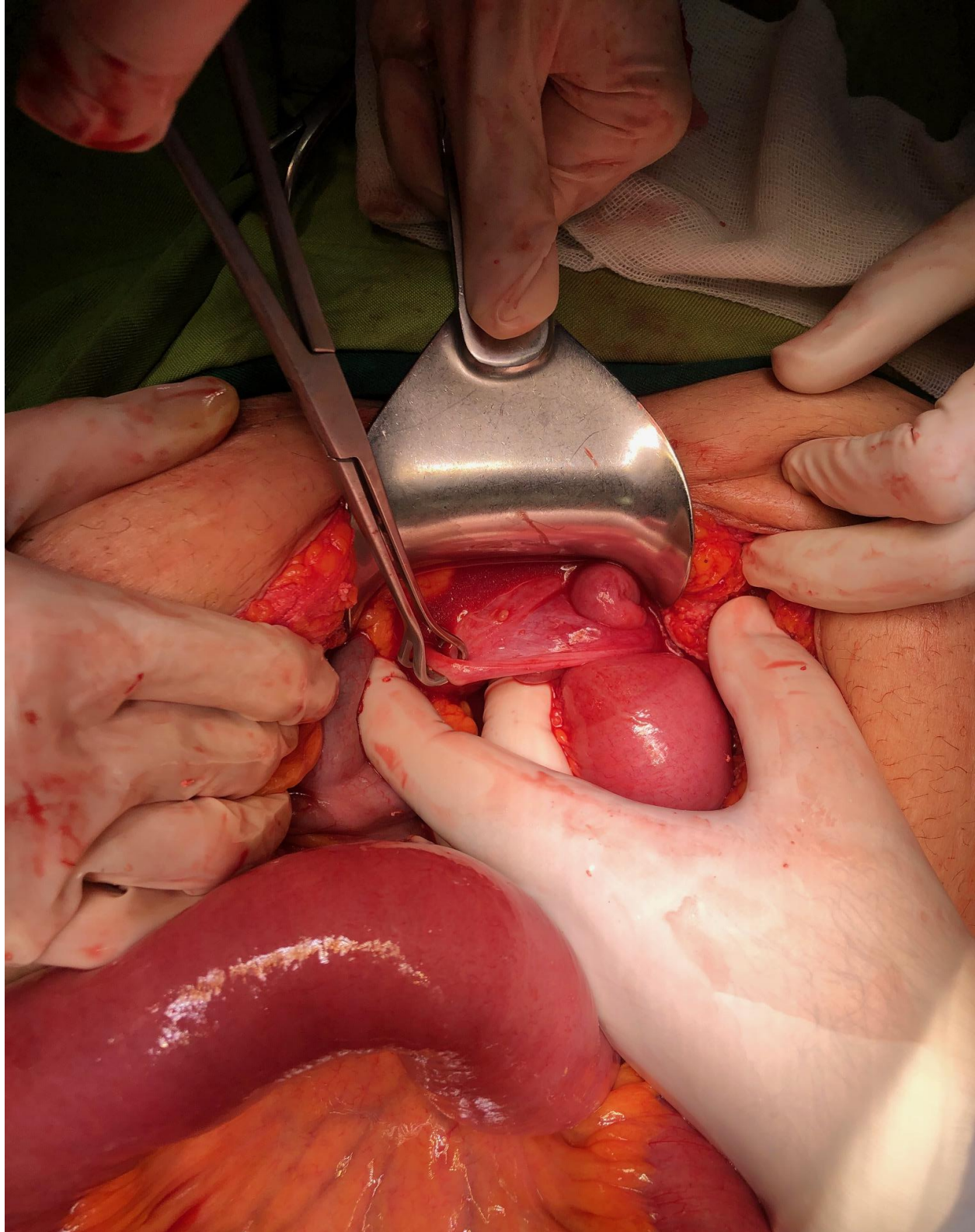


Figure1: Internal hernia

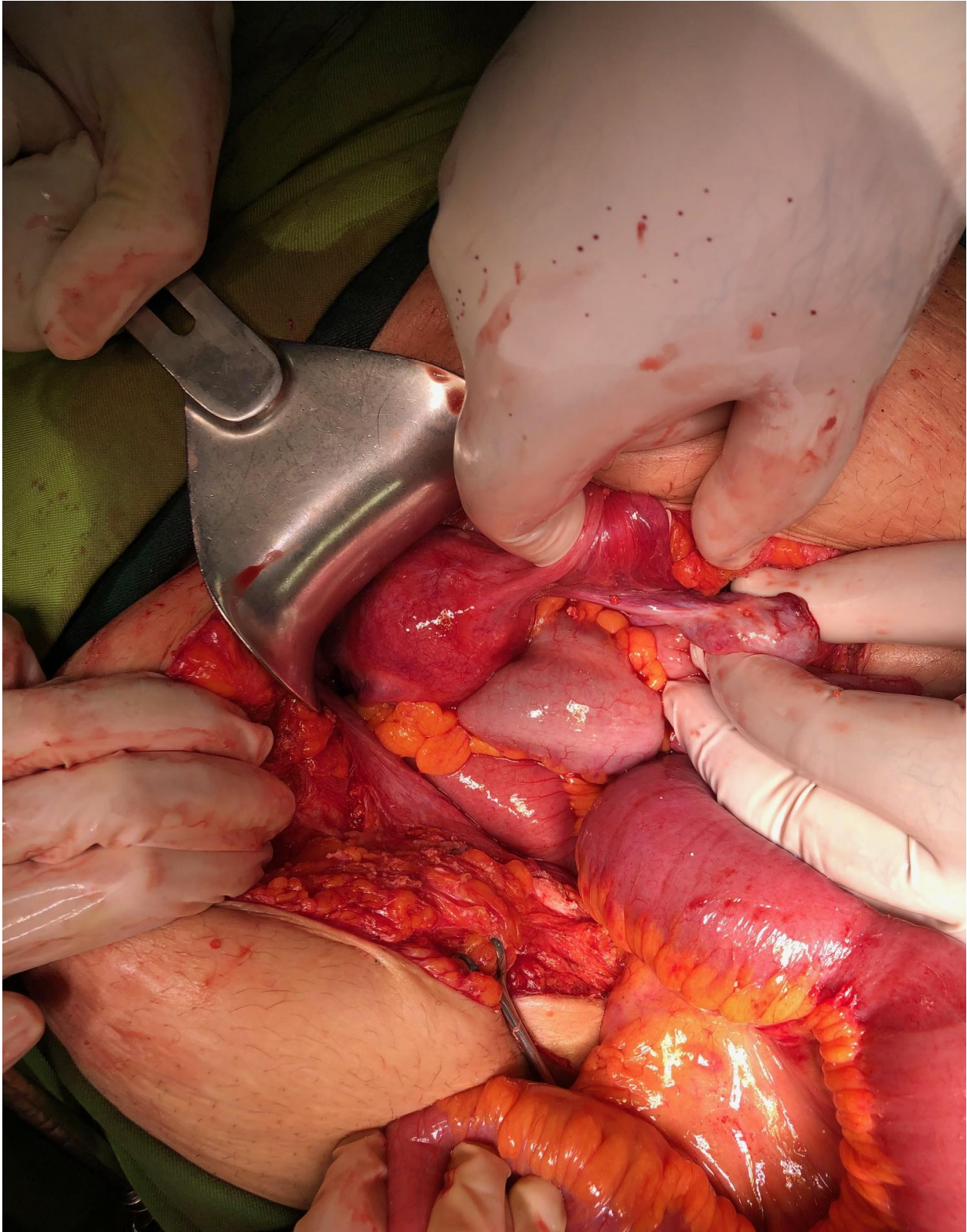


Figure 2: ruptured broad ligament of uterine

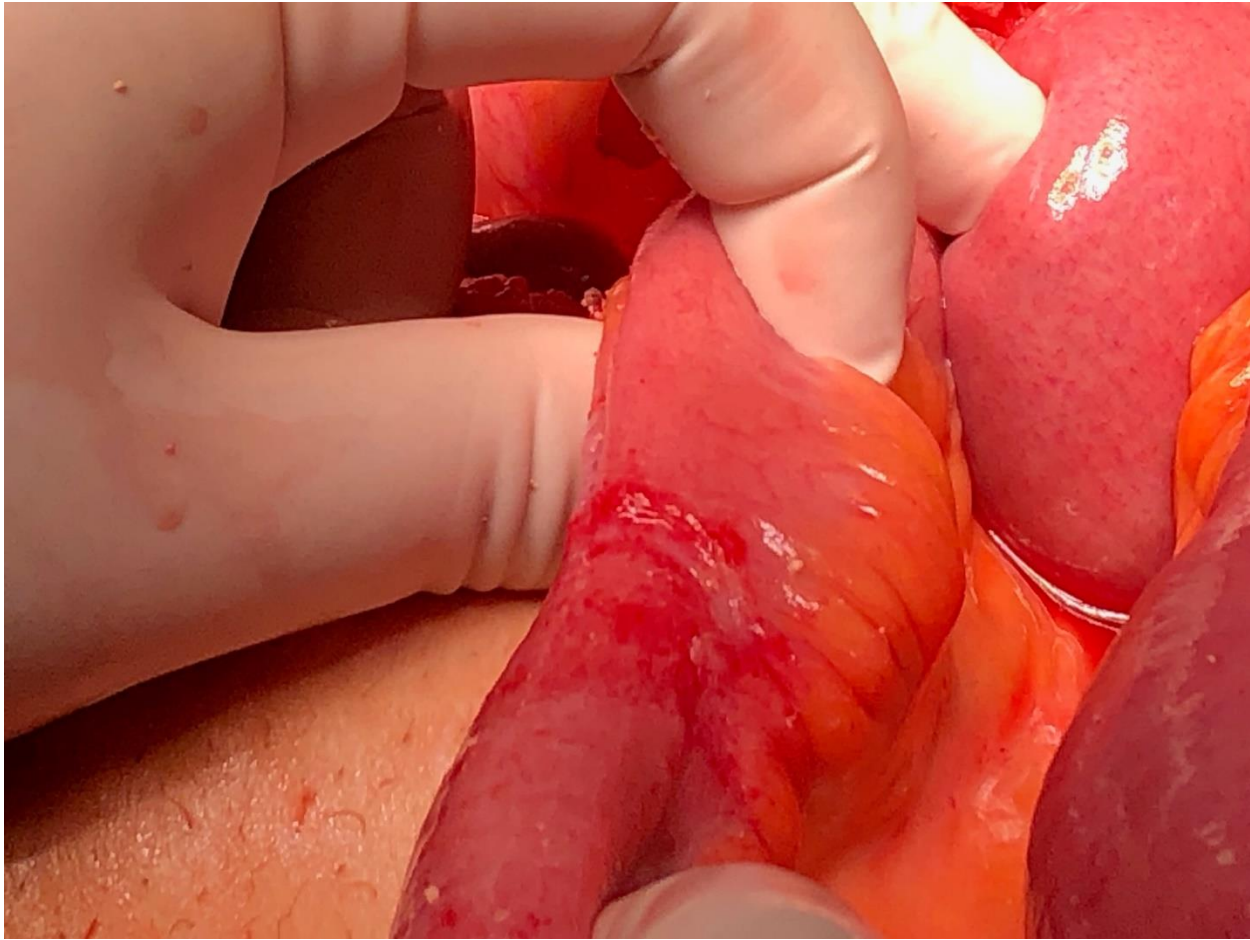


Figure 3: Lacerated small intestine

Discussion:

Internal hernia is defined as the herniation of an organ into an unusually large fossa, fovea, or foramen in the abdominal cavity. Internal hernias occur in 0.2–5.8% of all cases of small bowel obstruction. On the other hand, internal hernias in the pelvis, including the broad ligament of the uterus, Douglas fossa, and pararectal fossa, occur in <6% of cases [11]. Internal hernia is an uncommon cause of mechanical small bowel obstruction [12]. Small bowel internal hernias (IHs), a rare cause of small bowel occlusion (SBO) and small bowel strangulation, while more commonly seen in young adults, can also affect elderly patients and pose a significant diagnostic challenge due to their nonspecific symptoms. In most cases, laparotomy was used to diagnose IHs. However, multidetector computed tomography (MDCT) is usually the best imaging tool to use in the emergency setting for the diagnosis of IHs [13]. An internal hernia is a rare cause of an internal hernia that may require massive bowel resection [14].

Conclusion:

An internal hernia may be either congenital or acquired [5]. Preoperative diagnosis of internal hernia is very rare. Early intervention and surgical correction goes a long way in preventing high morbidity and mortality associated with cases of internal hernia [2]. Internal hernia is a rare cause of intestinal obstruction [3]. An abdominal computed tomographic scan showed evidence of an intestinal obstruction at a site [4]. Internal hernias represent the penetration of intestinal loops through congenital or acquired openings within the mesentery or peritoneum [6]. IH is a rare condition with a prevalence of less than 1% in the general population and is primarily reported in children as a congenital anomaly [7]. In adults, it may develop as an acquired condition resulting from abdominal injury, peritoneal inflammation, or iatrogenic factors following previous surgical procedures

[8,9,10]. Small bowel internal hernias (IHs), a rare cause of small bowel occlusion (SBO) and small bowel strangulation, while more commonly seen in young adults, can also affect elderly patients and pose a significant diagnostic challenge due to their nonspecific symptoms. In most cases, laparotomy was used to diagnose IHs. However, multidetector computed tomography (MDCT) is usually the best imaging tool to use in the emergency setting for the diagnosis of IHs [13]. A paraduodenal hernia is a rare cause of an internal hernia that may require massive bowel resection [14]. Few cases of intestinal obstruction after colostomy are caused by internal hernia [15].

Declarations:

Ethical Approval and Consent to participate:

The content of this manuscript are in accordance with the declaration of Helsinki for Ethics. No committee approval was required. Oral and written consent to participate was granted by her husband.

Consent for publication:

“Written informed consent was obtained from the patient's legal guardian for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.”

Availability of supporting data

It is available.

Competing interests:

The author declares that they have no competing financial interests and nothing to disclose.

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Authors' contributions:

Ahmad Reza Shahraki is the surgeon of patient and writes this paper. Elham Shahraki edits paper and Elahe Shahraki collects data's.

The authors declare that they have no competing financial interests and nothing to disclose.

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