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Herniation Through Defects in the Broad Ligament

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ABSTRACT

Background: We sought to assess hernia characteristics and classification through comprehensive review of the literature involving broad ligament herniation.

Methods: A literature search via MEDLINE and Embase databases was conducted to identify and select broad ligament herniation studies published between January 1, 2000 and September 30, 2020. Extracted data included previous surgical history, previous obstetric history, diagnostic imaging, herniated organ, hernia classification, and repair performed. The reported data has been compared to a unique case of broad ligament herniation that presented to our institution.

Results: A total of 44 articles with 49 cases were identified for the study. Eighteen (36.7%) patients had a history of previous abdominal surgery while 29 (59.2%) had a history of previous childbirth. Type I (51.0%) and Type II (18.4%) defects were most commonly reported with most patients reporting only one defect (85.7%) using the Cilley classification. Twenty-nine patients underwent primary laparoscopic repair of the defect while 19 patients underwent exploratory laparotomy.

Conclusions: The analysis of previously reported cases adds to the limited literature on broad ligament hernias and highlights the surgical management of this uncommon pathology. It also highlights the need for a broad differential diagnosis when female patients present with pelvic pain or symptoms of small bowel obstruction. The broad ligament should be fully inspected when mesenteric defects are suspected as multiple defects can be present as evidenced by the attached case study.

Key Words: Broad ligament, Hernia, Small bowel, Minimally invasive surgery.

BACKROUND

Internal hernias are defined as a protrusion of intra-abdominal viscera through a mesenteric defect. Herniation through the broad ligament is rarely reported and constitutes only 4% of all internal hernias.[1,2] Patients with a broad ligament hernia present with a wide spectrum of symptoms, ranging from none to acute small bowel obstruction. The diagnosis is challenging given the nonspecific clinical and radiographic findings. While small bowel is the most commonly reported herniated organ, rare cases of adnexal and sigmoid colon herniation have also been reported.[3] We present a surgical review of the 44 reported studies on broad ligament hernias over the past 20 years and include a case of small bowel obstruction secondary to small bowel herniation through multiple defects in the broad ligament that had undergone laparoscopic repair.

METHODS

A literature search via MEDLINE and Embase databases was conducted to identify broad herniation studies published between January 1, 2000 and September 30, 2020. All articles that reported on broad ligament herniation were included using the "OR" Boolean operator. Our search string was as follows: broad hernia OR broad herniation OR Allen Masters OR internal broad hernia. We only included studies that were limited to case series or case report articles and where patients had confirmed cases of broad ligament herniation. References of each

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included study were reviewed so that additional eligible case reports could be identified and included. Cases of Allen-Masters syndrome were also reviewed to identify cases of broad ligament herniation. We excluded cases reporting on internal hernias that did not involve the broad ligament and cases that described bowel obstruction due to ambiguous pelvic herniation without definitive or suggestive diagnosis. Literature on basic sciences, randomized control trials, and animal or cadaver studies were excluded. We also excluded studies that reported on the same patient cohort as another study but with shorter duration of follow-up.

Two authors independently entered the search string in each respective database. The search was performed in September of 2020. Initial search terms yielded a total of 529 articles. Study titles and abstracts were copied into a single electronic database to screen for duplicates which eliminated 484 articles and resulted in 45 unique articles. Of these 45, one article was only listed in Chinese with no available texts in English and thus, was excluded to maintain the efficiency of our study. The remaining 44 articles were wholly analyzed, and, after applying the exclusion criteria detailed above, the 44 studies were confirmed to have valid reported cases of broad ligament herniation. Forty studies reported case series articles, with three studies reporting two cases, and one study reporting three cases, yielding a total of 49 reported patient cases.

RESULTS

Case Report

A 51-year-old female with no significant past medical or surgical history with five previous spontaneous vaginal deliveries presented with one-day history of nausea, multiple episodes of nonbloody, nonbilious vomiting, and diffuse abdominal pain. She had two bowel movements the day before presentation and her examination was positive for diffuse abdominal tenderness without guarding or rebound tenderness. Vitals were within normal limits and initial blood work-up revealed a white blood cell count of 100.1 with a left shift of 86%. Computed tomography (CT) of the abdomen/pelvis was significant for a coiled loop of small bowel with transition from the dilated proximal small bowel to collapsed distal small bowel along the left pelvic sidewall (**Figure 1**). The patient was initially treated with nasogastric decompression and intravenous hydration. Her obstruction resolved within 24 hours. Subsequent joint review of the CT images by the operating surgeon and a second radiologist raised the suspicion of an internal hernia. For this reason, coupled with the fact that the patient had no previous surgical history or alternative explanation for bowel obstruction, the patient was counseled to undergo a diagnostic laparoscopy. At laparoscopy, the small bowel was carefully examined from the ligament of Treitz to the ileocecal valve. There were no small bowel abnormalities or intra-abdominal adhesions. Focused evaluation of the site of radiographic small bowel transition in the left pelvis revealed two defects in the broad ligament, each measuring approximately 2 cm x 2 cm and a sciatic hernia along with pelvic venous congestion. The broad ligament defects were consistent with types I, and II respectively. Both defects in the broad ligament along with the sciatic hernia defect were closed with polyglycolic acid sutures, and the broad ligament was thoroughly examined for any additional defects (**Figure 2**). Additionally, there were

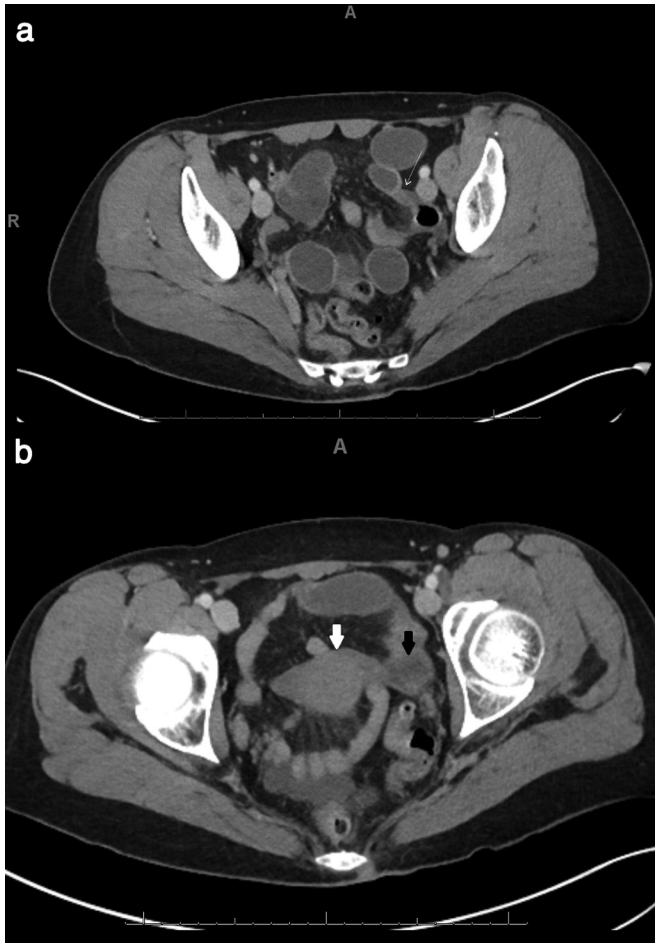

Figure 1. Transition point visualized at the White arrow (A) with the uterus and the left ovary visualized anteriorly and inferiorly (B).

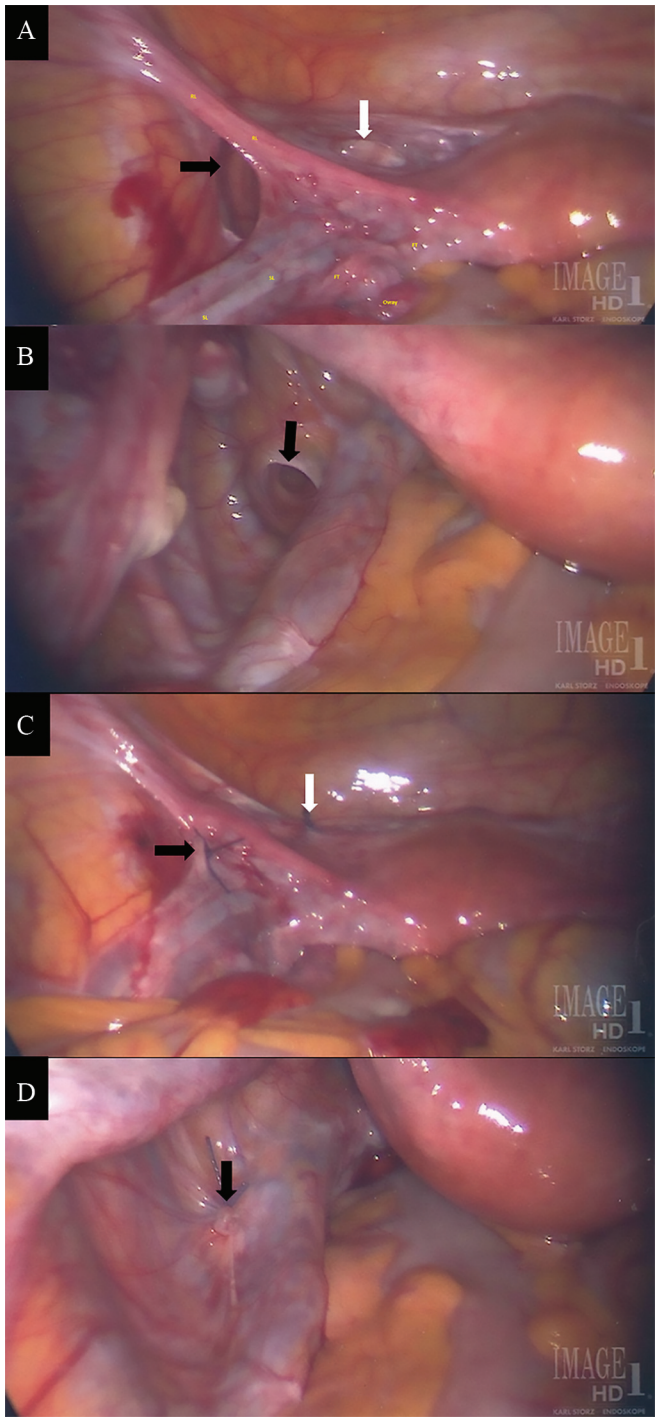

Figure 2. (A) Type I defect (White arrow) and type II defect (Black arrow); (B) pelvic sciatic hernial defect (Black arrow), along with the pelvic congestion syndrome, demonstrated by the chronically engorged pelvic venous structures (ovarian vessels and presacral venous complex); (C) Repaired type I and II defects (White and Black arrows); and (D) repaired pelvic sciatic hernia (Black arrow).

two infarcted epiploic appendages of the sigmoid colon that were presumed to have herniated through the left sided defect and spontaneously reduced with the small bowel. These were resected. The patient recovered well after the procedure and was discharged within 24 hours after tolerating a regular diet with bowel function. Patient was evaluated two years postoperatively and reported no recurrent symptoms.

Literature Review

Forty studies reported case series articles, with three studies reporting two cases, and one study reporting three cases, yielding a total of 49 reported patient cases. The average patient age was 44.7+/–13.2 (mean+/- standard deviation). Only 35 (71.4%) cases reported the type of observed defect using the Cilley classification. Of the 35 cases, 25 reported a type I defect, with only 7 studies reporting a type II defect, and 3 studies reporting a type III defect. Nine studies reported bilateral herniation, 19 studies reported left hernias, 19 studies reported right hernias and two studies did not specify whether hernia was bilateral, right, or left sided. Twenty (40.8%) patients had a history of previous abdominal surgery while 33 (67.3%) had a history of previous childbirth, pregnancy, or endometriosis. Ten (20.4%) patients lacked any pregnancy history and 6 (12.2%) patients lacked both pregnancy and previous surgical history.

Forty-five patients underwent emergent surgery for bowel obstruction secondary to broad ligament herniation. Four patients underwent elective surgery for chronic pelvic pain. One was found to have herniation of the sigmoid colon through the broad ligament without signs/symptoms of bowel obstruction. One patient was found to have bilateral large broad ligament defects without organ herniation. Two were found to have ovarian herniation.

Five patients were found intra-operatively to have a contralateral asymptomatic broad ligament hernia.

79.6% of reported patients with broad ligament hernia had small bowel herniating through the broad ligament, making it the most commonly herniating organ, followed by large bowel 12% and ovaries 6%.

An extensive summary of the literature review findings is shown in Tables 1, 2, and 3.

Table 1.
Summary of Studies Reporting on Herniation Through the Broad Ligament over the Last 20 Years

Study:	Age:	Diagnostic Imaging:	Defects Location:	Herniated Organ(s):	Surgical History:	Pregnancy/ History:	Intervention:
Kanbur et al. 2000[23]	48	U/S and Small bowel series	Left	Small bowel	None	Yes	Exploratory laparotomy
Fukuoka 2002[24]	47	XR; U/S; CT	Left	Small bowel	None	Yes	Exploratory laparotomy
Nozoe et al. 2002[25]	59	CT	Right	Small bowel	Appendectomy	Yes	Exploratory laparotomy
Guillem et al. 2003[26]	33	CT	Right	Small bowel	None	Yes	Laparoscopic surgery
Haku et al. 2004[27]	52	Upright XR; CT	Left	Small bowel	Appendectomy	Yes	Exploratory laparotomy
Oladele 2006[28]	45	XR	Right	Small bowel, transverse colon	None	Yes	Exploratory laparotomy
Hiraiwa et al. 2006[8]	28	Upright XR; CT	Right	Small bowel	None	No	Exploratory laparotomy
Ferrari et al. 2007[29]	35	U/S	Bilateral	None	None	No	Elective Diagnostic Laparoscopy
Varela et al. 2007[9]	29	CT: XR	Left	Small bowel	Appendectomy, umbilical hernio-plasty, Endometrial laparoscopic ablation	Yes	Laparoscopic surgery
Agresta et al. 2007[11]	38	U/S; XR	Right	Small bowel	Appendectomy	No	Laparoscopic Surgery
	55	U/S; XR	Left	Small bowel	None	Yes	Laparoscopic Surgery
Kosaka et al. 2007[30]	37	XR; CT	Left	Small bowel	None	Yes	Exploratory laparotomy
Takayama et al. 2007[31]	94	CT	Right	Small bowel	Appendectomy	n/a	Laparoscopic surgery
Garcia-Oria 2007[32]	43	U/S; XR	Left	Small bowel	Unspecified bowel surgery	No	Laparoscopic Surgery
Vo 2008[33]	32	U/S	Left	Sigmoid colon	C-section	Yes	pfannenstiel incision converted to midline laparotomy
Demir et al. 2009[34]	42	Multiple Diagnostic Laparoscopies for endometriosis	Right	Ovary	Laparoscopic en-dometrial surgery	Yes	Elective Laparoscopic surgery
Leone et al. 2009[35]	36	U/S; Upright XR	Bilateral	Small bowel	Unspecified bowel surgery	No	Laparoscopic surgery
Mailleux et al. 2010[36]	38	Contrast CT	Right	Small bowel	None	Yes	Laparoscopic surgery
Onida et al. 2010[21]	35	U/S; Diagnostic Laparoscopy	Bilateral	Small bowel	None	No	Laparoscopic surgery
Tan 2010[37]	65	n/a	Right	Small bowel	Appendectomy	n/a	Exploratory laparotomy

Table 1. Continued

Study:	Age:	Diagnostic Imaging:	Defects Location:	Herniated Organ(s):	Surgical History:	Pregnancy/ History:	Intervention:
Karmali et al. 2010[13]	35	CT	Left	Small bowel	None	Yes	Laparoscopic surgery
Brion et al. 2011[38]	35	U/S; Upright XR; CT	Bilateral	Small bowel	None	Yes	Exploratory laparotomy
Hassadia et al. 2011[39]	41	U/S	Bilateral	Both ovaries	None	Yes	Elective Diagnostic Laparoscopy
Bangari et al. 2012[40]	42	U/S	Right	Small bowel	None	Yes	Laparoscopic surgery
Langan et al. 2012[41]	59	Small bowel series; CT	Left	Small bowel	None	Yes	Exploratory laparotomy
Quiroga et al. 2012[18]	74	XR; CT	Left	Small bowel	None	Yes	Exploratory laparotomy
Ngabou et al. 2012[42]	42	CT	Left	Small bowel	None	Yes	Laparoscopic surgery
Marraoui et al. 2012[17]	24	XR; CT	Right	Small bowel	None	No	Laparoscopic surgery
	51	CT	Right	Small bowel	Appendectomy and tubal ligation	Yes	Laparoscopic surgery
Lo et al. 2013[43]	31	Diagnostic Laparoscopy	Left	Sigmoid colon	C -section; Laparoscopic endometrial excision.	Yes	Laparoscopic surgery
Vyrdal et al. 2014[44]	42	CT	Right	Small bowel	None	Yes	Laparoscopic surgery
Matsunami 2014[45]	36	CT	Left	Small bowel	C-section	Yes	Laparoscopic surgery
Post et al. 2014[46]	34	CT	Bilateral	Small bowel	None	No	Exploratory laparotomy
	45	CT	Right	Small bowel	NA	Yes	Laparoscopic surgery
Rodrigues et al. 2015[47]	47	XR; U/S; CT	Bilateral	Small bowel	None	No	Laparoscopic surgery
Bailey et al. 2016[48]	45	CT; U/S	Right	Small bowel	n/a	n/a	Laparoscopic surgery
Otani-Takei 2016[49]	65	Upright XR; CT	n/a	Small bowel	Abdominal hysterectomy, PD catheter placement	n/a	Exploratory laparotomy
Takeyama 2018[50]	52	CT	Left	Sigmoid colon	n/a	Yes	Elective Laparoscopic surgery
Toolabi et al. 2018[51]	37	Upright XR; CT	Left	Small bowel	Umbilical hernia repair	n/a	Laparoscopic surgery
El-Kheir 2019[52]	39	Upright XR; CT	Right	Small bowel	C-section	Yes	Exploratory laparotomy
Mazzetti 2019[15]	40	XR; CT	Bilateral	Left ovary, sigmoid colon; fallopian tube	Appendectomy, C-section	Yes	Laparoscopic surgery
Fernandes et al. 2019[12]	35	Upright XR; CT	Bilateral	Small bowel	None	Yes	Exploratory laparotomy
	43	Upright XR; CT	Left	Small bowel	None	No	Exploratory laparotomy
	51	Upright XR; U/S	n/a	Small bowel	None	Yes	Exploratory laparotomy
Guerra 2019[14]	61	CT	Right	Small bowel	n/a	n/a	Laparoscopic surgery

Table 1. Continued

Study:	Age:	Diagnostic Imaging:	Defects Location:	Herniated Organ(s):	Surgical History:	Pregnancy/ History:	Intervention:
Sugishita 2020[53]	71	CT	Right	Small bowel	Ovarian cyst excision	Yes	Laparoscopic surgery
Higaki 2020[54]	38	U/S; CT	Left	Sigmoid colon	C-section	Yes	CS followed by Exploratory laparotomy
Koizumi 2020[55]	41	CT	Right	Small bowel	None	Yes	Laparoscopic surgery
Pascotto 2020[56]	43	CT	Left	Small bowel	Laparoscopic Uterine cyst excision	n/a	Diagnostic laparoscopy converted to exploratory laparotomy

U/S, ultrasound; CT, computed tomography; CS, colonoscopy; PD, peritoneal dialysis; XR, radiograph; C-section, Caesarean section; n/a - indicates that the information was not included in the study.

Further results of imaging modality along with operative approach and intra-operative findings are reviewed in the discussion section below.

DISCUSSION

Internal hernias are rare, with a reported incidence of 00.2 – 00.9% and classified by Ghahremani and Meyers according to the location of the hernia orifice.[3] Some of the common internal hernias include paraduodenal, foramen of Winslow, intersigmoid, pericecal, transmesenteric, and transomental hernias.[1–3] Although difficult to ascertain, paraduodenal hernia and transmesenteric hernia are the most prevalent internal hernia types. Broad ligament hernia accounts for only 4% – 7% of all internal hernias.[1,2,4]

The broad ligament is a double layer of peritoneum that envelops the female pelvic organs during the fusion of mullerian ducts in-utero.[5] This protective layer of mesentery attaches the lateral portions of the uterus to the lateral pelvic sidewall and includes the mesometrium, mesosalpinx, and mesovarium.[5] The broad ligament is an important intra-operative landmark as it plays a key role in forming the rectouterine pouch and is a common site for endometriosis.[6]

The earliest reported case of a broad ligament traces back to 1861 during an autopsy study by Quain et al.[7–9] Almost 70 years later, Gray et al. was the first to describe the operative repair of a broad ligament hernia in 1933.[10] The etiology of the defect can be congenital or acquired. Congenital causes are secondary to the spontaneous rupture of congenital cystic structures, which are related to developmental abnormalities in the pelvic peritoneum.[11,12] Acquired defects are secondary to operative trauma, pregnancy, birth trauma, inflammatory pelvic disease, or disease processes like endometriosis causing significant damage to the mesentery.[11,13] Allen-Masters syndrome, originally introduced in 1955, describes a clinical syndrome which may result from defects in the broad ligament as well as the cul-de-sac or uterosacral ligament.[14–16] Development of this syndrome has been attributed to traumatic obstetric tears or chronic endometriosis which may induce scarring and weaking of tissues.[16] Thus, this syndrome was also included in our search to identify possible cases of herniation through the broad ligament.

The traditional teaching is that broad ligament hernia is associated with multiparity. In the present case, the patient had a history of five previous spontaneous vaginal deliveries. The obstetric history in the 49 previously reported cases of broad ligament hernia were analyzed and summarized in **Table 2**, along with additional significant patient history. It is notable that 18.4% of patients lacked any pregnancy or previous surgical history. This suggest that almost 20% of the reported cases may be congenital or develop de novo as primary broad ligament hernias. The pregnancy history of the oldest patient (94 years old) in the analysis was unknown but she had previous abdominal surgery while the youngest patient (24 years old) did not have prior pregnancies or surgical history.[17,18] Interestingly, three patients younger than 30 years were included in the analysis, two of whom had no previous pregnancies or surgical history. Although the analysis is incomplete given limited patient history, the reporting of such hernias in younger patients did not depend on a previous history of surgery or pregnancy.

It is interesting to note that the majority, but not all visceral herniation, led to acute/chronic pain or bowel obstruction.

Table 2.
Summary of Reported Patient History Profiles and Symptoms Presenting with Broad Ligament Herniation

Reported Patient Characteristics	n (Cases/Total), Percent of total (%)
Age	
Average age	44.7 +/− 13.2 (Mean +/− Standard Deviation)
Age < 40	20/49, 40.8 %
Age < 40	29/49, 59.2 %
Clinical Presentation	
Acute presentation of bowel obstructive symptoms	35/49, 71.4 %
Chronic history of bowel obstructive symptoms	6/49, 12.2 %
Unspecified duration of symptoms	8/49, 16.3 %
Obstetric History	
History of childbirth, pregnancy, or endometriosis	33/49, 67.3 %
No history of childbirth, pregnancy, or endometriosis	10/49, 20.4 %
Unknown obstetric history	6/49, 12.2 %
Surgical history	
History of abdominal surgery	20/49, 40.8 %
Additional history of cesarean section	6/49, 12.2 % (6 included in 19)
No past surgical History	25/49, 51.0 %
Unknown surgical history	4/49, 8.2 %
Geographical location	
Japan	11/49, 22.4 %
France	5/49, 10.2 %
Italy	5/49, 10.2 %
United States of America	4/49, 8.2 % *5th reported case in this study
Portugal	4/49, 8.2 %
United Kingdom	4/49, 8.2 %
Various other (2 or fewer reported cases per country)	16/49, 32.7 %

There were only two reports of isolated ovarian herniation through a broad ligament defect. Both patients had a history of endometriosis and had chronic pelvic pain.

Hernias through the broad ligament can be classified by the degree of peritoneal defect or the location of the defect. Hunt et al. classified defect intro two main categories: fenestra and pouch. Fenestra type involves a defect in both the peritoneal layers while the pouch type only involves a defect in one of the two layers. The anatomical classification by Cilley includes three types of variants. Type I is caudal to the round ligament of the uterus while type II is above the round ligament, including suspensory ligament of the ovary, mesosalpinx or mesovarium. Lastly, type III defect is in the two-layered surface of the round ligament and mesometrium (**Figure 3**).[13,20]

An analysis on the classification types is limited given only 35 (71.4%) cases reported the type of observed defect using the Cilley classification. Of the 35 cases, 25 reported a type I defect with only 7 studies reporting a type II defect and 3 studies reporting a type III defect. This is consistent with the trend observed in Cilley's original paper published in 1986 where type I defects were the most common.[13,20] The observed defect type, herniated organ, and hernia characteristics of cases reported from the literature are further summarized in **Table 3**.

In the present case, three separate defects were observed in the mesentery: one between the round ligament and ovarian ligament (type 1), one above the fallopian tube (type 2), and lastly one located in the distal inferior portion of the uterus (sciatic hernia). Although the majority

Table 3.
Summary of Specific Reported Characteristics of Broad Ligament Herniation

Reported Hernia Characteristics	n (Cases/Total), Percent of total (%)
Type of hernia (Cilley Classification)	
Type 1	25/49, 51 %
Type 2	7/49, 18.4 %
Type 3	3/49, 6.1 %
Unable to determine	14/49, 26.5 %
Location of hernia(s)	
Right	19/49, 38.8 %
Left	19/49, 38.8 %
Bilateral	9/49, 18.4 %
Unspecified	2/49, 4.1 %
Organ(s) herniated through defect	
Small bowel	39/49, 79.6 %
Large bowel (sigmoid colon, transverse colon, cecum)	5/49, 12.2 %
Ovary(s)	2/49, 6.1 %
Multiple	2/49, 4.1%
None	1/49, 2.1 %
Number of defects in broad ligament	
Single defect, unilateral (1 total)	42/49, 85.7 %
One defect, bilateral (2 total)	4/49, 8.2 % (4 included in 18)
Two defects, unilateral (2 total)	2/49, 6.1 %
Three defects, unilateral or bilateral	0/49, *First reported case in this study
Unspecified	1/49, 2.1 %
Surgical Intervention	
Exploratory Laparotomy	19/49, 39 %
Laparoscopic Surgery	29/49, 59 %
Laparoscopic converted to open	1/49, 2 %

(85.7%) of patients present with only one defect, the entire broad ligament and pelvic cavity should be inspected for potential sites of herniation. All identified defects should be repaired at the index surgery in order to prevent recurrent obstruction.

CT imaging can diagnose a broad ligament hernia when mesenteric vessels of herniated intestine are seen penetrating a defect in the broad ligament. Another reported diagnostic finding is enlargement of the distance between the uterus and ovary, causing deviation in opposite directions.[1,17,18] Ultrasound is useful in assessing the position and vascular supply of the ovaries.[19] As summarized in **Table 1**, multimodal imaging (CT, ultrasound, and plain radiograph) is often employed for patients presenting with bowel obstruction or pelvic pain. CT scanning was used for evaluation in 70% of cases. When used, a pre-operative CT diagnosis of broad ligament hernia was made 36% of the time. Ultrasound was used in 20% of cases either as an adjunct or primary imaging modality. It was also used for pre-operative assessment of sites for trocar entry.[19] When used as a solitary imaging modality, it was not helpful in diagnosing broad ligament herniation. In one case report, it was used as an adjunct to CT scan and demonstrated small bowel herniation through a broad ligament defect. Plain radiograph was employed in 37% of cases. As expected, there were no specific findings on plain radiograph that led to the pre-operative diagnosis of broad

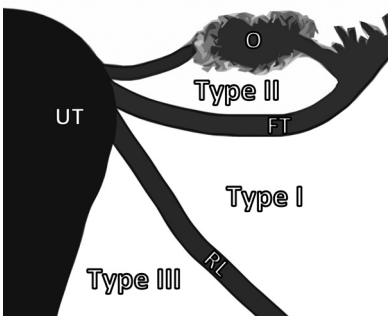

Figure 3. Variations of defects through the broad ligament. UT, Uterus; O, Ovary; RL, Round Ligament.

ligament hernia. Due to the low prevalence of broad ligament hernias, the cause of small bowel obstruction could be confused for other hernia defects. As demonstrated in this case report, careful and diligent review of imaging along with clinical suspicion are necessary for diagnosis. Patients presenting with small bowel obstruction secondary to an internal hernia should undergo exploratory surgery to identify the cause of obstruction and prevent recurrent episodes.

The surgical management of broad ligament hernias were first described through an open approach, but laparoscopic advancements in surgery have led to minimally invasive repair. As referenced in **Table 3**, 59% of patient who presented with broad ligament herniation were successfully managed via a laparoscopic approach. Laparoscopy can afford improved visualization of the pelvic structures and is often associated with decreased use of postoperative analgesics, decreased rate of wound complications, and decreased hospital length of stay.[22] The threshold for minimally invasive management should be low in patients presenting with symptoms of small bowel obstruction, asymptomatic patients with a visible transition point on imaging in the pelvic cavity, endometriosis, and patients with previous childbirths. The fact that several patients were found to have incidental broad ligament herniation at the time of elective laparoscopy for pelvic pain demonstrates the utility of laparoscopy for diagnosis of broad ligament hernias.

Mesenteric defects are mainly closed primarily, but omental patches and/or a fenestration procedure, whereby the round ligament and the peritoneal fold are divided, can be considered in cases with larger defects, eliminating the possibility of herniation. Our literature review did not demonstrate superiority of any particular technique. We therefore suggest that the choice of procedure be based on the operative anatomy and surgeon's technical ability.

CONCLUSION

Broad ligament herniation is a difficult diagnosis given the nonspecific clinical symptoms and the limited utility of radiographic studies. Patients can present with a broad spectrum of symptoms, ranging from acute to chronic complaints making the diagnosis more challenging. Contrary to traditional teaching, one should be aware that 20% of patients with broad ligament herniation will have no prior surgical or obstetrical history. The present case highlights the need for a broad differential diagnosis when female patients present with pelvic pain or symptoms of small bowel obstruction. CT scan is a valuable diagnostic tool for broad ligament hernias. The case also calls attention to the probability of multiple defects and thus, emphasizes the importance of fully inspecting the broad ligament intra-operatively to effectively treat herniations and avoid recurrent symptoms. Laparoscopic intervention should be considered as a means of repair.

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