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A RARE CAUSE OF INTESTINAL OBSTRUCTION. SMALL BOWEL HERNIATION THROUGH BROAD LIGAMENT IN AN 42-YEAR-OLD LADY: A CASE REPORT

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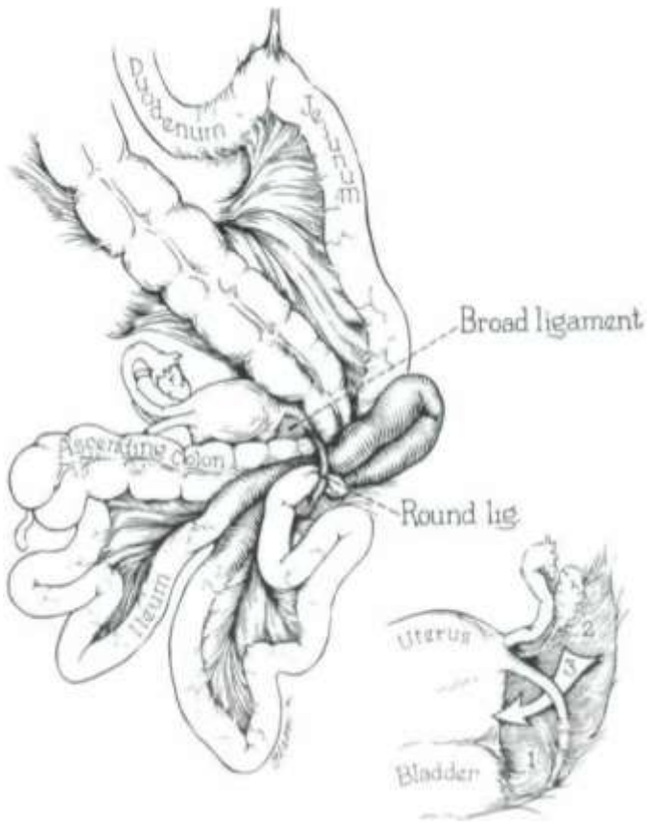
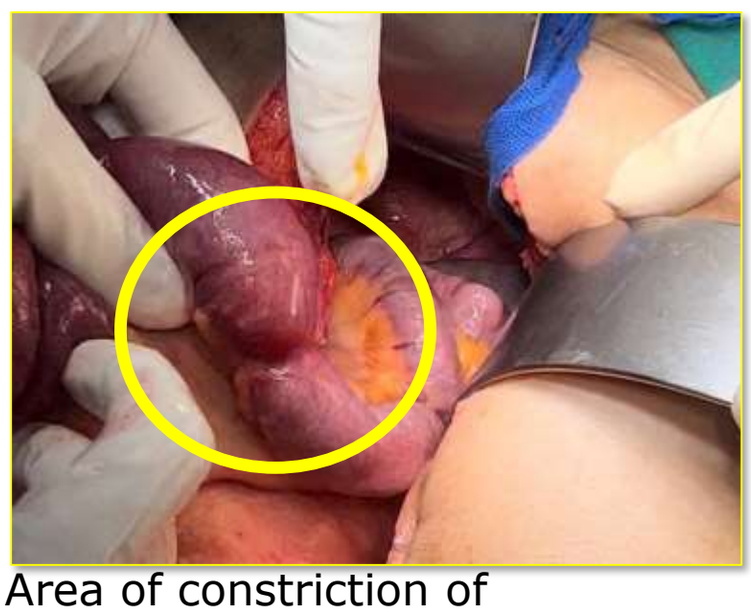
Introduction.

Intestinal obstruction (IO) is a common clinical presentation in the emergency department. It can be treated conservatively and surgically. IO commonly occurs due to intraluminal obstruction mostly tumors or extraluminal causes. However internal herniation is rare cause of IO due to protrusion of viscera through defects in the mesentery or peritoneum and cause obstruction. Broad ligament hernia (BLH) is rare and difficult to diagnose clinically as it presents as IO and with vague symptoms. Mostly, diagnosed incidentally intra-operatively or by imaging if symptoms are mild and patient is clinically stable physically and biochemically. The treatment by surgical repair of the BLH with or without bowel resections to resolve the IO. We herein report as rare case of IO due to small bowel herniation through broad ligament.

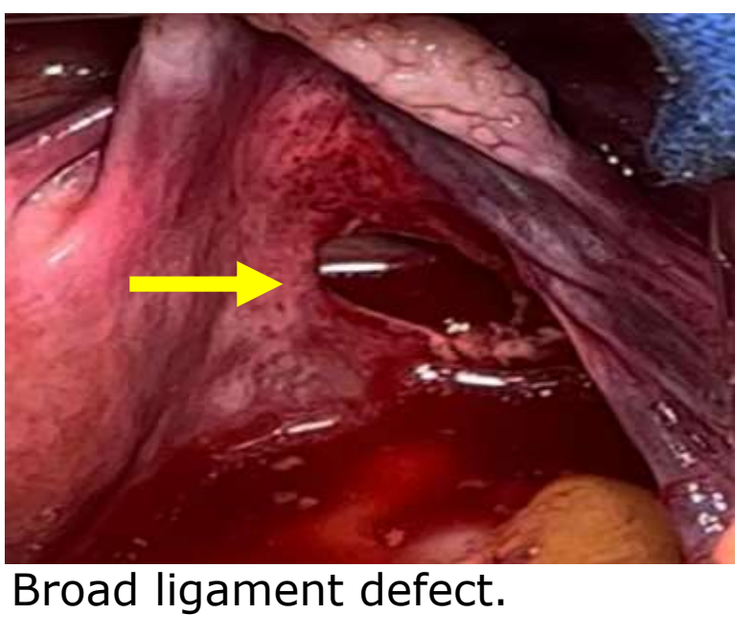
Case Report.

This patient is a 42-Year-Old female, without any co-morbids presented with progressive worsening abdominal pain for 3 days. Associated with bilious vomiting and fever. She was afebrile and no bowel open during the symptoms. Her hydration status was fair. Her blood gases were initially lactic acidosis but improve with hydration. Abdominal examination revealed generalized guarding with no apparent peritonitis. Decision for laparotomy taken in view of her symptoms with high suspicion of possible perforated viscus. Laparotomy revealed right broad ligament herniation of small bowel causing close loop obstruction. Herniation reduced and small bowel integrity assessed intra-operatively. No bowel resection was done in view of bowel grossly normal affected bowel.
No intraperitoneal contamination. Broad ligament defect was repaired with non-absorbable suture. Post operative patient's condition improved and was able to pass flatus and subsequently able to pass motion. She was discharged home postoperative day 5 and during clinic appointment, she was well with good appetite.

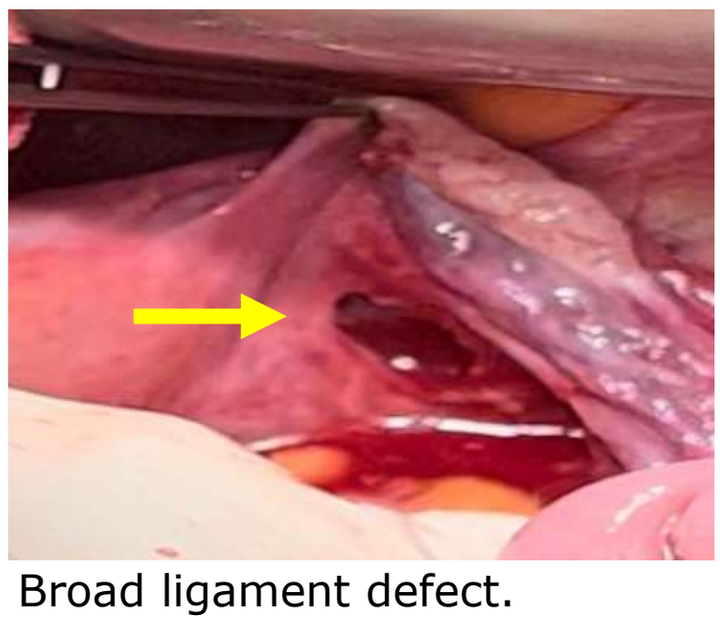




Area of constriction of small bowel.



Broad ligament defect.



Broad ligament defect.

Discussion

Diagnosing IO caused by BLH is difficult. It is rare among all types of internal hernia. It accounts for only 4% of internal hernia. The availability of computed tomography has increased chances of accurate preoperative diagnosis. The cause of broad ligament defect can be grouped as either congenital or acquired.
Congenital broad ligament defects are generally bilateral whereas acquired defects are mostly unilateral.
Causes of acquired defects are previous surgery, pregnancy, birth related trauma or previous pelvic inflammatory disease which increases
the intra-abdominal pressure.

The first classification of broad ligament defects was described in 1934 on the basis of peritoneal involvement of the defect, by Hunt
1.Fenestra type: Presence of defect in the two peritoneal layers (most common).
2.Pouch type: Defect affects only one layer of the peritoneum.
3.Hernia sac type: The bowel is lined by a weak layer of peritoneum leading to formation of an internal hernia within a sac.

Conclusion

BLH is a rare clinical presentation which requires a high index of suspicion for it to be diagnosed in both, patients presenting with symptoms of acute intestinal obstruction; as well as those who present with vague recurring lower abdominal symptoms. Early management is important to avoid threatening complications. BLH can be even managed by minimally invasive surgery even in acute setting however when presented with tightly wrapped around the bowel will require enlarging the defect and reducing the content. Likewise in this case presentation, open surgery was performed with suspicion of viscus perforation.