A Rare Case Report of Laparoscopic-assisted Approach in Management of Small Bowel Obstruction Secondary to B Lynch Suture Through Small Bowel Serosa and Mesentery

Dr. Cecilia Nguyen, DO, Dr. Elena Kang, DO, Dr. Robert Christenson, DO,
Dr. Alexander Gonzalez Jacobo DO, Dr. Jackie Battista, Dr. Paul Grewal, DO
Department of Surgery
St. John's Episcopal Hospital, Far Rockaway, NY

ST. JOHN'S EPISCOPAL HOSPITAL
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Introduction

A 37 year-old 6 week postpartum female presents to the ED with worsening lower abdominal pain

Postpartum hemorrhage can often become an obstetric emergency which can be managed effectively through medical and surgical interventions. When uterine massage, manual compression and uterotonic drug fail to control bleeding in atonic postpartum hemorrhage, uterine compression sutures can be placed. The most common technique for uterine compression is the B-lynch suture. [1,2]

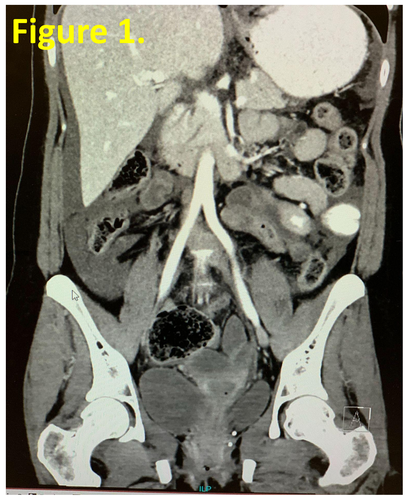
Case Description

Our patient is a 37 year old female 6 weeks postpartum from her first childbirth. She travelled from Pennsylvania with her newborn to visit her terminally ill mother to give her mother the opportunity to see her grandson. Upon presentation to the ED, patient was complaining of worsening abdominal pain for the last 48 hrs with associated nausea and vomiting. According to the patient, she underwent some complications with her recent delivery including prolonged labor as well as c-section having been converted from epidural to general, uterine atony, hemorrhaging, a B-lynch surgical procedure and subsequently a prolonged ICU admission with multiple blood transfusions. In the ED, she complained of some abdominal pain and over 10 episodes of non-bilious, non-bloody vomiting. She presented afebrile, with stable vital signs. Her physical exam demonstrated a well healed pfannenstiel scar, RLQ and suprapubic tenderness, guarding, and rebound tenderness.

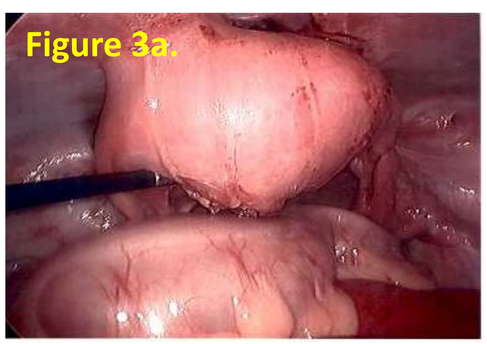
On admission her WBC was elevated to 18.6, and a CT of the abodmen and pelvis demonstrated free fluid without free air, thickening of the small bowel, focal areas of stool burden concerning for acute process of the lower abdomen associated with her emergent c-section. (Fig 1,2) She states she has been having irregular bowel movements most of her life but has been more irregular since the procedure.

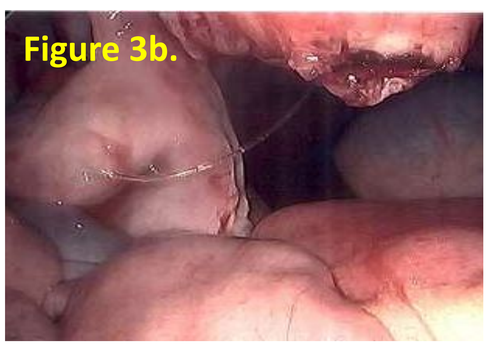
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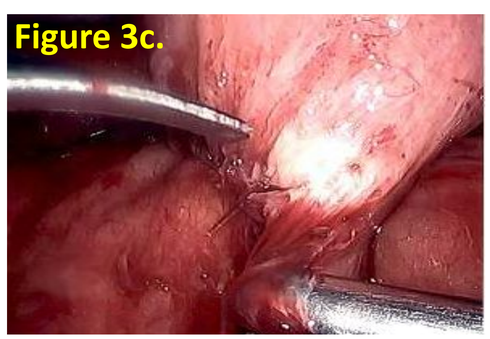
With CT findings, leukocytosis, history, and worsening clinical exam concerning for acute abdominal pathology for possible obstruction vs. perforation, discussion occured with patient and spouse regarding surgery. Patient agreed to operative intervention after discussion regarding risks and benefits. Patient underwent diagnostic laparoscopy, enterolysis, and removal of uterine stitches adhered to small intestine. In the OR, a stitch from the uterus to small bowel serosa and mesentery causing small bowel obstruction, hemorrhagic fluid present in abdomen, adhesions lysed and stitched removed. (Fig 3) The small bowel was red and inflamed and upon release of adhesions, the small bowel became more pink in color and had good peristalsis. Complications following uterine compression suture placement appear to be rare. In our case report, patient had B lynch suture that went through the uterus and distal jejunum causing a small bowel obstruction, which was treated successfully laparoscopically. The patient recovered well. On post operative day 1, the patient is tolerating diet, passing flatus, voiding on her own without issues and was surgically stable for discharge.

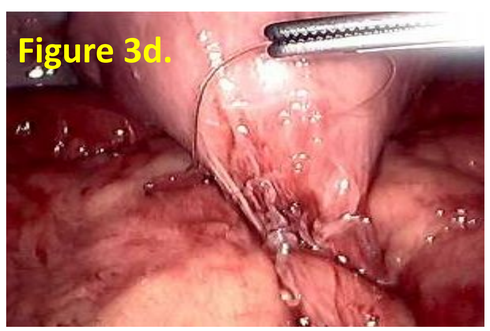












Discussion

B-lynch suture has been found to be a highly successful technique that is relatively simple to learn, appears safe, preserves future reproductive potential.[3] The technique involves a pair of vertical brace chromic gut sutures around the uterus, essentially to oppose the anterior and posterior uterine walls working by direct application of pressure on the placental bed bleeding and by reducing the blood to uterus.[4]

While B lynch suture is a favorable technique, it does not come without its complications. In our case, the patient presented with a postoperative complication of small bowel obstruction. Patient was taken to the OR where it was noted that a portion of the distal jejunal serosa was caught by chromic gut sutures from previous obstetrical repair. This caused inflammation and edema of small intestine that was trapped by stitches from the uterus into the mesentery of the small intestine and the distal jejunal serosa causing it to start to twist over. A laparoscopic approach was employed without complication. After some lysis of adhesions and removal of chromic gut sutures, the irritated area immediately looked better. Patient recovered well and safely discharged after one day.

Small bowel obstructions is one of the most common causes in hospital admission for acute abdominal pain. Open laparotomy treatment is associated with postoperative adhesion and recurrence of small bowel obstruction. Laparoscopy has somewhat replaced traditional laparotomy as an elective treatment for a number of conditions. A series of small studies have shown diagnostic success in more than 90% of cases and total therapeutic success rates of 50 to 90% by experienced laparoscopic surgeons. [5]

Conclusion

Laparoscopy has been associated with a lower rate of morbidity and shorter hospitality as seen in our patient. Not only should laparoscopy assisted approach be attempted with complications of uterine compression suture and small bowel obstruction but considered when accounting for shorter length of stay and faster recovery. [6]

References

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