

We are excited to announce the release of the 2019 Spring Edition of the SCQR Case Study!!

We are changing things a little this time, and making the Case Study available through a Qualtrics survey. Feel free to discuss the Case on the Forum *after Friday, May 10th*, so we can all learn from each other, but still provide time for everyone to review the case study first. The first part of the survey contains 8 Case Study questions, and for the approximately 20 remaining questions, we included a SCQR survey (our first since 2015!) to get to know you, your normal practices, and your needs better.

This is optional, anonymous, and non-graded, but extremely valuable. The results of the Case Study, along with the most frequently missed questions from the December certification exam, will be used by the MSQC Clinical Team for review at the June 21st SCQR Training Day. The SCQR survey will also be analyzed by the MSQC Team, so we can better align the support we provide with your needs, and for future planning.

Please complete the Case Study and SCQR survey by **Friday, May 10th** which is available using the link available on the SCQR Forum, in the email with subject line "2019 Spring SCQR Case Study".

- You can leave any answers blank if you choose
- You can exit and come back to the survey using the link, your responses will be saved
- At the end of the survey, there is a text field to add comments and/or your name only if you wish
- If you are an SCQR and do not have access to the Forum, please contact MSQCCustomerSupport@med.umich.edu

Your participation is greatly appreciated!

Cheryl & Rhonda

MSQC Clinical Site Coordinators

You will want to review and print the Operative and Pathology Report below to answer questions in the Case Study about Principal CPT code, other procedures performed, wound class, and postop outcomes.

OPERATIVE REPORT

DATE: 3/5/19

PREOPERATIVE DIAGNOSIS

Incarcerated umbilical hernia.

POSTOPERATIVE DIAGNOSIS

Incarcerated umbilical hernia.

Small bowel ischemia.

PROCEDURES PERFORMED

1. Exploratory laparotomy.
2. Small bowel resection.
3. Umbilical hernia repair.

SPECIMENS:

A : Hernia Sac and contents

B : Small bowel, ileum

INDICATIONS

This pleasant 55-year-old male was seen in my office last week with a fairly large umbilical hernia containing a small portion of the omentum and unable to be reduced completely that had been previously asymptomatic for the past year. No signs of bowel strangulation or obstruction had been present. The patient's associated comorbidities including hypertension and diet-controlled diabetes remained stable, being closely followed by his primary care physician. All options for treatment, all risks and complications including, but not limited to, infection, hematoma, postoperative bleeding, need for further surgery, recurrence of the hernia, problem with infection, problem with mesh infection, rejection, etc., were described in detail to the patient. All questions were answered to full satisfaction and surgical informed consent was obtained for elective surgery on 4/22.

There was an acute change in this hernia several days ago while the patient was jogging when he noticed an immediate increase in pain as well as enlargement in the size of the hernia. The patient did not seek any medical help at that point. He was initially seen at an outside hospital yesterday and found to have overlying skin changes and a nonreducible hernia and labs that showed a leukocytosis of 13,000 without any other abnormal findings. CT scan demonstrated incarcerated bowel inside of the umbilical hernia with signs of mesenteric edema and fluid around the bowel. He was transferred here for further management. He complains of localized abdominal pain and loss of appetite, but no nausea or vomiting, and had normal bowel movement yesterday, which makes bowel obstruction less likely. The patient was offered a hernia repair including an exploratory laparotomy with possible bowel resection and mesh placement, with its risks, benefits, and alternatives explained, he was amenable to proceeding with surgery earlier than planned.

FINDINGS

The patient had an approximately 7 cm fascial defect, but had herniated an extensive loop of small bowel and omentum that appeared to be marginally well perfused. Because of how the small bowel was incarcerated and potentially non-viable, as well as the multiple areas of serosal tears present, the decision was made to resect this portion of small bowel measuring approximately 25 cm and perform a primary stapled anastomosis. There was no obvious perforation of the bowel or appendix, and no obvious abscess. No other pathology identified.

TECHNIQUE

After informed consent was obtained, the patient was taken back to the operating room and placed supine on the operating table. General anesthesia was induced. The patient was intubated, and the abdomen was prepped and draped in the usual sterile fashion. A final time-out was performed confirming the patient and the details of the procedure. A lower midline skin incision was made using a scalpel ensuring an elliptical excision of the skin overlying the hernia.

Once this was done, dissection was carried down through the tissues with electrocautery, then carried down to the junction of the hernia sac with the fascia, and in the inferior portion of the wound, the hernia sac was then completely opened revealing small bowel and omentum trapped and incarcerated within the hernia. The omentum was then separated from the small bowel loops, and the small bowel was very closely examined. It was demonstrating multiple serosal tears as well as a general dusky appearance. There was small amount of fibrinous exudate on top of the serosal openings. Omentum was pulled out of the hernia sac, and a portion of it was cauterized and transected, leaving some omentum in the sac. The umbilical hernia sac was excised, along with the omentum it contained. No purulent fluid was observed in the wound.

Because the bowel appeared to be marginally viable, it was decided to resect this portion out of the bowel and plan for a primary stapled anastomosis. The bowel was then prepped for resection. The GIA stapler was used to transect the bowel. The specimen was then passed off the field. Attention was then turned towards the remaining small bowel ends. Stay sutures were then placed in the corners of each end of the bowel, and an enterotomy was made in the corners on the antimesenteric side. Each leg of the GIA stapler was then inserted into each limb of the bowel, and a primary stapled anastomosis was made ensuring that the anastomosis was made antimesenteric with no involvement of the omentum in the staple line. A TX stapler was then used to complete the stapled anastomosis. Once this was done,

the remaining bowel appeared to be healthy and viable and it did appear to be ileum that was resected. There was no spillage of bowel contents during this portion of the case.

At this point, the abdomen was copiously irrigated. Once this was done, the small bowel was returned to its usual position and remaining omentum positioned into the abdomen and an approximately 7 cm fascial defect remained. The preperitoneal space was dissected with gentle digital dissection in order to allow the placement of a Ventralex ST mesh which was secured to the anterior abdominal wall with several interrupted nonabsorbable sutures. A satisfactory closure was obtained without any evidence of bleeding, tension, or other complication. The subcutaneous tissue was closed with resorbable suture. The skin was approximated with 4-0 Monocryl and Steri-Strips. A sterile dressing was applied. The patient tolerated the procedure very well, was transferred to the Recovery Room under satisfactory condition, stable vital signs. All counts were correct at the end of the case.

PATHOLOGY REPORT

Final Diagnosis: Segment of ileum with ischemic injury, fibrinopurulent exudate, fibrinous serosal adhesions and multiple serosal tears. There is no evidence of perforation.

Gross: Received in formalin, labeled "small bowel, ileum" is a portion of small bowel which is 25 cm in length. It is unoriented and 3.5 cm in circumference at each margin. The serosa is partly smooth gray, partly roughened and black. The mucosa is unremarkable except in the central 4 cm corresponding to the black serosa where there appears to be tearing.