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Laparoscopic Treatment of Early Postoperative Ileus After Laparotomy.

Anna Marija Lescinska (lescinska@hotmail.com)
University of Latvia https://orcid.org/0000-0001-7561-4259
Igors Ivanovs
University of Latvia

Case report

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Abstract

Aim. The case report demonstrates a successful laparoscopic treatment of early postoperative small bowel obstruction after open strangulated umbilical hernia repair with mesh.

Case report. An 86-year-old female was admitted to the hospital due to abdominal pain for 2 days localised in the umbilical region. A diagnosis of strangulated umbilical hernia was set, and emergency operative therapy was performed. On the third postoperative day the patient showed symptoms of bowel obstruction, confirmed on CT. An emergency laparoscopy proceeded. It revealed small intestine loop fixation to the mesh through the peritoneal defect. While separating the intestine a defect in bowel wall was found and sutured laparoscopically. Patient was discharged from the hospital on the 8th postoperative day.

Conclusion. Laparoscopic treatment after open hernia surgery is an alternative access for redo surgery in early postoperative period. It provides acceptable results even in contaminated area without needs to reopen surgical wound.

Background

There is a great number of patients that develop postoperative ileus (POI) after abdominal surgery. POI represents the largest influencing factor for the hospital length of stay after bowel resection. It also has great implications for patients and resource utilization in health care, which means that it is of a great importance to assess new methods to treat and to decrease the length of postoperative ileus. During the past decade, there has been a remarkable amount of research performed, evaluating POI, and great progress has been made in our understanding and treatment of it. (Augestad et al., 2010) The diagnosis ileus is one of the most common indications for an emergency laparotomy. In 70% of the cases, the small intestine is affected, and in 30% it is the colon and the rectum. While incarcerated hernias are a major cause in developing countries, the most common causes in western countries are postoperative adhesions that lead to an acute bowel obstruction. The timeframe for treatment of a complete mechanical obstruction is short as acute ischemia can lead to necrosis with bowel perforation within 6 hours. The perioperative lethality for an emergency laparotomy due to an ileus ranges from 5-15%. (Listle et al., 2017) The management of postoperative ileus remains controversial. Whilst open surgery has been the mainstay of treatment, more recently other approaches have been employed, including laparoscopic surgery.

Case Presentation

An 86-year-old female was admitted to the hospital due to abdominal pain for 2 days localised in the umbilical region. The patient has had umbilical hernia for about 20 years. On objective examination revealed a painful, irreponible hernia bulge 15 cm in diameter in umbilical region. A diagnosis of strangulated umbilical hernia was set, and emergency operative therapy was performed. During open

hernio-laparotomy strangulated greater omentum was resected and herniorrhaphy with sublay polypropylene mesh was performed. After operation patient was transferred to surgical department. On the third postoperative day the patient showed symptoms of bowel obstruction, confirmed on CT scan. An emergency laparoscopy proceeded. It revealed small intestine loop fixation to the mesh through the peritoneal defect. While separating the small intestine a defect in bowel wall was found and sutured laparoscopically. Postoperative period was uneventful. Patient was discharged from the hospital on the 8^{th} postoperative day.

Conclusions

Postoperative ileus is a frequent occurrence after abdominal and other types of surgery, and is associated with significant morbidity and costs to health care providers.

The aim of this case report is to emphasize the importance of possible laparoscopic surgery approach for the treatment of postoperative ileus.

List Of Abbreviations

POI – Postoperative ileus

LOS – Length of stay

Declarations

Conflict of Interest.

Author Lescinska AM and author Ivanovs I declare that they have no conflict of interest.

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Consent for publication – Received.

Availability of data and materials – Not applicable.

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Authors' information – Anna Marija Lescinska, lescinska@hotmail.com, +371 29258517

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