

Laparoscopic Elective Colonic Operation and Concomitant Abdominal Wall Hernia Prosthetic Repair: Safe and Feasible?

Since the introduction of laparoscopic surgery, the promise of lower postoperative morbidity and improved cosmesis has been achieved. Continuous technological developments in instrumentation, access, and optics devices were necessary to allow better surgical results and patient's safety. In recent times, innovative techniques of natural orifice transluminal endoscopic surgery (NOTES), laparoendoscopic surgery (LESS), and single-incision laparoscopic surgery (SILS) have been applied as a step toward even more less-invasive procedures.^[1] The final promises of minimally invasive surgery are improved cosmetic results and earlier postoperative recovery with the same oncological and functional results in comparison to standard laparoscopic methods. Despite this, many hurdles to widespread adoption of these techniques exist, including technical challenges, such as decreased triangulation and unfamiliar viewing angles, and more philosophical issues, such as the necessity of demonstrating benefits of these techniques over conventional laparoscopy. Future research will seek to overcome these obstacles.

Therefore, studies addressing advantages and risks of minimally invasive surgical procedures are of utmost importance. I congratulate the authors for this interesting case report^[2] and also for their continuous effort to study the best surgical care and techniques in their area of expertise as demonstrated in two previously published papers by this group.^[3,4]

Intra-abdominal operations, including elective colonic operations,^[5] abdominal aortic aneurysm repair,^[6] and renal transplantation^[7] associated with abdominal wall hernia prosthetic repair, have been shown to be safe and feasible. In our service, we also perform elective colonic operation associated with prosthetic repair of abdominal wall hernias. The advantage of correcting two diseases in a single anesthetic and surgical procedure is clearly beneficial to the patient. The major drawback of a simultaneous abdominal wall hernia prosthetic repair together with any potentially contaminated intra-abdominal procedure would be surgical site or wound infection.

This risk albeit rare, should be considered when performing these procedures together. Postoperative mesh infection can be avoided by meticulous dissection, hemostasis, and asepsia. Even in cases of postoperative mesh removal due to prosthetic mesh infection, hernia recurrence is uncommon.^[8] The fibrous reaction evoked within the transversalis fascia by prosthetic material rather than the physical presence of the mesh is the major factor of the mesh repair strength.

In this case report, a left inguinal incision was performed to correct an inguinal hernia and to allow extracorporeal bowel resection and anastomosis after laparoscopic anterior resection. Another possibility that could be used in this case would be a laparoscopic transabdominal preperitoneal repair (TAPP) associated with laparoscopic anterior resection. Anyway, the presented case shows that a full preoperative surgical evaluation should include anatomical, anthropometric, and minimally invasive issues individualized for the patient and for the intended surgical procedure in order to optimize surgical results.

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