

Modified Technique of Laparoscopy-Assisted Surgeries (Transportal)

Manickam Ramalingam, M.D., Kallappan Senthill, M.D., and M.G. Pai

Abstract

Background and Purpose: We present the role of the transportal technique of laparoscopy-assisted surgeries. This report highlights the advantages of transportal technique over pure laparoscopic surgeries and laparoscopy-assisted surgeries.

Patients and Methods: In the last 3 years, we have adopted this approach for six patients during various procedures. This report highlights modified extracorporeal (transportal) technique, namely, ileal isolation, restoration of ileal continuity in ileal conduit and ileal ureter; ileal isolation, restoration of ileal continuity detubularization of the loop in ileocystoplasty; and ureteral tailoring in the megaureter before ureteral reimplantation. This technique was performed by transportal exteriorization of the bowel through the 12- or 15- or 20-mm port followed by the conventional technique of hand-sewn anastomosis. The bowel and ureter are restored to the abdominal cavity through the same port once the extracorporeal part is completed.

Results: There was no significant intraoperative or postoperative morbidity or mortality. The transportal technique without a formal incision reduces operative time; is less demanding; and avoids an abdominal incision, as in the laparoscopy-assisted technique.

Conclusion: The transportal technique of laparoscopy-assisted surgery achieves all the advantages of pure laparoscopic surgery without a formal incision, as in laparoscopy-assisted surgery. Hence, it is a less morbid, quicker, and cost-effective method.

Introduction

LAPAROSCOPIC SURGERY has a few limitations, such as the duration of surgery and learning curve, especially in advanced reconstructive surgery.^{1,2} Laparoscopy-assisted surgery can overcome the limitations of pure laparoscopic surgery to a certain extent³⁻⁷ wherein an incision of 2 to 5 cm or more is made to complete or assist the procedure. We describe a method of transportal technique using the port instead of an incision. The extracorporeal part of the surgery is performed by exteriorizing the bowel or ureter transportally (12-, 15-, or 20-mm port) depending on the reconstructive work and physical characteristics of the patient.

We present our experience in six patients who underwent various advanced reconstructive procedures (ureteral tailor-

ing, ileal conduit, ileocystoplasty, ileal ureter) using the transportal technique.

Patients and Methods

We have used the transportal technique for intestinal surgeries and in ureteral tailoring before ureteral reimplantation. In the last 3 years, this technique was performed in six patients (ileal conduit, 2; ileocystoplasty, 2; ileal ureter, 1; and for tailoring the ureter before ureteral reimplantation, 1).

The site and size of the port depended on the type of surgery and build of the patient. In ileal conduit and ileocystoplasty, the port is placed in the right iliac fossa to exteriorize the ileum and/or ureter as needed. This port is in the lie of the mesentery. In children, a 12-mm port may be suffi-