Suprapubic single-incision laparoscopic segmental small bowel resection with intracorporeal manual anastomosis

Giovanni Dapri*, Konstantin Grozdev, Sebastian Faict, Guy-Bernard Cadière

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Background

Single-incision laparoscopy (SIL) can be offered to young ladies presenting malignant digestive tumors because they can undergo to surgery through the suprapubic access, with a final non-visible result because under the bikini line [1].

Video

A 40 year old lady presenting an unknown anemia was admitted to consultation. Preoperative work-up evidenced an adenocarcinoma of the small bowel at 120 cm from the pylorus [2,3]. A suprapubic SIL segmental small bowel resection was proposed to the patient. The procedure was performed with the surgeon between the patient's legs, using three reusable trocars above the pubic bone. Curved reusable instruments permitted to surgeon to work under ergonomic conditions, maintaining a low cost of SIL (Fig. 1a). For the insertion of the linear stapler, a temporary 5-mm scope was used and the intestinal continuity was established by a completely intracorporeal manual end-to-end anastomosis (Fig. 1b). The mesenteric window was closed as well. The specimen was extracted suprapublically, after protection and have joined together the three windows of trocars.

* Corresponding author. Department of Gastrointestinal Surgery, European School of Laparoscopic Surgery, Saint-Pierre University Hospital, 322, Rue Haute, 1000 Brussels, Belgium. Tel.: +32 25354115; fax: +32 25353166.
E-mail address: giovanni@dapri.net (G. Dapri).

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Figure 1. Suprapubic single-incision using curved reusable instruments according to DAPRI (Karl Storz-Endoskope), allowing to perform under ergonomic positions (a) manual anastomosis (b).
Results

Laparoscopy took 160 min and perioperative bleeding was 20 cc. No postoperative complications were registered and the use of minimal pain killers allowed the discharge after four days. Pathology showed a poorly differentiated adenocarcinoma of the jejunum, with 17 negative nodes (pT3N0Mx). The postoperative follow-up, including blood tests and PET-scan, did not show any recurrence at 12 months.

Conclusions

Besides the known advantages of conventional multitrocar laparoscopy, this technique of SIL permits to offer satisfied oncologic results besides a non-visible surgical scar, because localized under the bikini line. Moreover, the abdominal trauma and the final scar length can be reduced, since related to the tumor’s size.

Conflict of interest statement

G. Dapri is consultant for Karl Storz-Endoskope, Tuttlingen, Germany. The other authors have no conflicts of interest or financial ties to disclosure.

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