Rectal sparing in modified posterior exenteration: description of the technique in 10 steps

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BACKGROUND
To achieve complete cytoreduction in ovarian carcinoma, rectal resection may be necessary in the case of gastrointestinal tract involvement. Posterior resection surgeries were described by Eiseinkopt and Bristow who modified Hudson’s pelvic peritoneectomy.

The concept of digestive sparing has been developed for several years. We propose a modified surgical approach of posterior resection by combining three principles (Hudson-type dissection, pushed Douglasectomy, and first stapling of the rectum) to optimize rectal sparing.

METHOD
Video 1 shows an 10-steps ‘en bloc’ pelvic peritoneectomy combined with digestive resection, illustrating the first stapling of the rectum. We associated other digestive resection during this procedure not present in Video 1 (peritoneectomy of the right diaphragmatic dome, mesentery and mesocolon). The surgery was performed by a senior surgeon and an assistant from the department.

RESULTS
The surgical procedure is divided into 10 steps:
Step 1: Supra-pelvic and intraperitoneal approach
Step 2: Pelvic and retroperitoneal approach
Step 3: Uterine vessel ligature
Step 4: Ureterolysis
Step 5: Pre-vesical peritonectomy
Step 6: Para-rectal space dissection
Step 7: ‘Hanging’ en bloc specimen
Step 8: Retrograde dissection of rectovaginal septum and Douglas pouch dissection
Step 9: First rectal stapling
Step 10: Proximal bowel division

Video 1 ‘En bloc’ pelvic resection: section of anterior and lateral part of vagina and beginning of the Douglasectomy. (a) Vagina. (b) Right ureter. (c) Cervix. (d) Mesorectum.
CONCLUSIONS

In our experience, the first section of the rectum is always feasible if the three principles are combined (Hudson-type dissection, advanced Douglasectomy, and first stapling of the rectum). The advantages of rectal sparing are that it allows an anastomosis to be made on the upper rectum, avoids lowering the left colonic angle, makes it very easy to combine other digestive resections ‘en bloc’, and facilitates repeat rectal resections in the case of recurrence. Standardization of this procedure will help young surgeons to learn the methodology and better grasp the steps involved.

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Acknowledgements Illustrations by Ludovic Chaix.

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Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Not applicable.

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