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VIDEO CORRESPONDENCE

Robotic-assisted enterovaginoplasty reconstruction following a posterior pelvic exenteration – a video vignette

Dear Editor,

A 49-year-old woman was referred to the advanced cancer clinic at the department of colorectal surgery at CHU Bordeaux with a large pelvic recurrence of a vaginal adenocarcinoma. The tumour involved a malignant rectovaginal fistula that was abutting the right-sided levator-ani muscle and adjacent to but not involving the right ureter. A robotic-assisted posterior pelvic exenteration with delayed coloanal anastomosis and enterovaginoplasty reconstruction was planned.

The daVinci Xi (Intuitive Surgical, California) robotic system was utilized and a standard docking procedure performed for a left lower abdominal approach. A standard posterior exenteration including a total mesorectal excision and hysterectomy was performed and the specimen delivered transvaginally with *en bloc* full vaginal excision.

For enterovaginoplasty formation, a 20 cm loop of small bowel 50 cm away from the ileocaecal valve was delivered with the vascular pedicle confirmed using transillumination. A standard side-to-side small bowel anastomosis was performed to restore small bowel continuity. A longitudinal enterotomy was performed along the anti-mesenteric border. The neovaginal reservoir was created using a 4-0 PDS single-layer anastomosis along both ileal sides starting at the apex of the posterior wall. The neovaginal orifice was fashioned at an approximate size of two finger widths. The neovaginal reservoir was delivered transabdominally to the vaginal orifice. A single-layer enterovaginal anastomosis was performed using 3-0 Vicryl sutures. A final laparoscopy was performed, and the apex of the neovaginal reservoir sutured to the peritoneum adjacent to the bladder using 3-0 Vicryl sutures.

The colonic conduit was sutured in position and opened to allow effluent passage. Vascularity of both the enterovaginoplasty and colonic conduit were assessed using indocyanine green. Deferred colonanal anastomosis was planned for postoperative day 4 in this case to reduce the potential for formation of colovaginal fistula with both coloanal and enterovaginal anastomoses performed at the same time. At postoperative day 4, an interrupted coloanal anastomosis was performed using 3-0 Vicryl sutures. Initially the sutures were placed in the 3, 6, 9 and 12 o clock positions and interrupted sutures were then placed in each quadrant between these initial sutures and tied when all were in a satisfactory position.

DATA AVAILABILITY STATEMENT

All data pertaining to this video is available in the published video vignette.

Christina A. Fleming
Alexandre Chauvet
Thomas Cauvin
Quentin Denost

Department of Colorectal Surgery, CHU Bordeaux, Bordeaux, France
Email: quentin.denost@chu-bordeaux.fr

ORCID

Christina A. Fleming https://orcid.org/0000-0003-2326-2655
Quentin Denost https://orcid.org/0000-0003-3088-5244

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.