Step-by-step total pelviperitoneectomy with modified posterior pelvic exenteration

Alvaro Tejerizo-Garcia 1,2, Alejandro Olloqui,1 Gregorio Lopez,1,2 Carmen Alvarez-Conejo,1 Oscar Caso-Maestro,3 Alvaro Díez3

The fundamental aim of advanced ovarian cancer surgery is to obtain complete cytoreduction. Due to the pelvic anatomy, en bloc removal of the uterus, adnexa, rectum, and surrounding peritoneum is mandatory.1

The effect of complete cytoreduction on survival in patients with advanced ovarian carcinoma has been demonstrated in many studies. In our opinion, radical oophorectomy is a technique that helps us achieve complete cytoreduction and minimizes bleeding, with a manageable rate of intra-operative and post-operative complications.2 3 4

To easily understand this complex surgery, our video shows 10 systematized steps to achieve total pelvic cytoreduction with total pelviperitoneectomy and modified posterior exenteration.

Our patient was a 50-year-old woman with a good functional status and nutritional state. She had no co-morbidities and underwent primary cytoreduction surgery and posterior adjuvant chemotherapy. The peritoneal carcinomatosis index calculated was 8.

The steps of the technique are as follows:

Lateral approach:
Step 1: Defining the surgical territory.
Step 2: Lateral peritoneectomy.
Step 3: Development of lateral avascular spaces, paravesical and lateral pararectal space.
Step 4: Uterine artery ligation.
Step 5: Development of medial pararectal space. Anterior approach:
Step 7: Ureteral tunnel development
Step 8: Anterior and lateral parametrium section. Colpotomy.
Step 9: Rectovaginal space development. Posterior approach:
Step 10: Pre-sacral space development. Sigmoid and distal rectum section.