Laparoscopically assisted radical vaginal hysterectomy in early-stage cervical cancer

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The role of minimally invasive radical hysterectomy for cervical cancer has been questioned1 since the publication of the Laparoscopic Approach to Cervical Cancer (LACC) trial results. However, it is likely that the lower survival rates shown in the minimally invasive surgery (MIS) arm were not directly related to the MIS itself, but rather to technical procedures linked to laparoscopic and robotic-assisted approaches. These include the use of uterine manipulators or the opening of the vagina through the abdominal cavity.2

Laparoscopically assisted radical vaginal hysterectomy (LARVH) or Coelio-Schauta procedure combines lymph node staging and pelvic space creation by laparoscopy with radical hysterectomy including parametrium-paracolpium resection performed predominantly by vaginal approach, as reported by Schauta. This technique has shown oncological results and surgical complications comparable with those reported for the open surgery arm of the LACC trial.3 During LARVH, colpotomy and closure of the vagina are performed at the beginning of the radical hysterectomy, precluding manipulation of the tumor during the procedure.

We present a step-by-step video demonstration of the LARVH technique as it has been performed for more than 25 years at Hospital Clinic of Barcelona following the surgical technique described by Dargent and Querleu to treat early-stage cervical cancer patients.4 This is a 37-year-old patient diagnosed with a 3.5cm squamous cervical cancer, International Federation of Gynecology and Obstetrics (FIGO) stage IB2, who underwent a...
LARVH. The procedure started by laparoscopic sentinel lymph node (SLN) biopsy using a hybrid tracer (technetium 99m labeled nanocolloid plus indocyanine green) since prior validation of this technique had been performed in our institution from 2001 to 2011. Intraoperative pathology ruled out SLN metastasis. After full development of both paravesical and pararectal spaces, ureters were dissected until the ureteric tunnel and uterine arteries were sectioned at their origin. Round and utero-ovarian ligaments were sectioned and vesical peritoneal reflection opened, moving the bladder aside. Afterwards, vaginal time was performed following Schauta’s technique and incorporating an advanced bipolar device, that allows tissue sealing and cutting. Operative time was 5 hours (vaginal time 1.5 hours) including total anesthetic time. There were no intraoperative or postoperative complications, and the hospital stay was 2 days.

Coelio-Schauta is a minimally invasive technique that adheres to the oncologic principle of tumor containment. It should be included in prospective randomized trials to clarify the role of MIS in early-stage cervical cancer.

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