Minimally-invasive cytoreduction in recurrent endometrial cancer: laparoscopic and uniportal video-assisted thoracoscopic surgery combined approach

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Cytoreductive surgery for recurrent abdominal endometrial cancer is typically performed by laparotomy.^{1,2} Furthermore, thoracic procedures are usually performed with a thoracotomy approach. Recently, the uni-portal video-assisted thoracoscopic surgery (VATS) has been proposed as the new evolution of VATS, with even less morbidity and faster recovery.^{3,4} The video shows a patient with third abdominal and thoracic recurrence of endometrial cancer, managed with a combined laparoscopic and uni-portal VATS approach (Video 1). The patient is a 58-year-old woman, initially diagnosed with International Federation of Gynecology and Obstetrics (FIGO) stage IB grade 2 endometrioid endometrial adenocarcinoma. She had two previous recurrences both treated with minimally-invasive resection and chemotherapy. Eighteen months after the end of chemotherapy, a positron emission tomography (PET)-computed tomography (CT) scan showed avid uptake in the liver capsule/right diaphragm and 1 cm right pulmonary nodule with mild uptake. She underwent laparoscopic full-thickness right diaphragm resection followed by uni-portal VATS with removal of right pleural nodules, diaphragm defect suturing, and an atypical resection of right middle lobe. Operation time was 180 min and estimated intra-operative blood loss was 80 ml. No macroscopic residual tumor was present at the end of the surgery. No intra-operative complication

was recorded. Post-operatively she developed a small right apical pneumothorax. She was discharged on day 4. Histology confirmed recurrent endometrial cancer in all specimens but in the pulmonary nodule (atypical hyperplasia). Adjuvant chemotherapy was started 14 days after the surgery. She is alive and disease-free 12 months after surgery. Minimally-invasive debulking abdominal and thoracic surgery to no residual disease for recurrent endometrial cancer, is feasible and ensures a rapid post-operative recovery to start medical treatment.

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Video 1. Laparoscopic and uniportal video-assisted thoracoscopic surgery combined approach for recurrent endometrial cancer.