



Surgical Film

Total pelvic peritonectomy for ovarian cancer with extensive peritoneal carcinomatosis in pelvic cavity



Libing Xiang¹, Shuang Ye¹, Huijuan Yang^{*}

Department of Gynecologic Oncology, Fudan University Shanghai Cancer Center, Shanghai, China
Department of Oncology, Shanghai Medical College, Fudan University, Shanghai, China

HIGHLIGHTS

- Ovarian cancer is characteristic of superficial implantation and peritoneal carcinomatosis.
- Complete removal of the disseminated tumors was achieved by total pelvic peritonectomy.
- We made small modifications of the Hudson procedure in this video.

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ABSTRACT

Background. Ovarian cancer is characteristic of superficial implantation and peritoneal carcinomatosis. Hudson introduced a novel technique 50 years ago, which removed the entire Douglas pouch as a false capsule of the tumor (Hudson, 1968 [1]). Angeles et al. standardized the procedure in 10 steps in a previous publication (Angeles et al., 2019 [2]). We made small modifications of the Hudson procedure in this video.

Ovarian cancer is characteristic of superficial implantation and peritoneal carcinomatosis. Hudson introduced a novel technique 50 years ago, which removed the entire Douglas pouch as a false capsule of the tumor (Hudson, 1968 [1]). Angeles et al. standardized the procedure in 10 steps in a previous publication (Angeles et al., 2019 [2]). We made small modifications of the Hudson procedure in this video.

Methods. The key points of the procedure were summarized as follows. Firstly, dissecting off the pelvic parietal peritoneum very superficially. Secondly, the round ligament, infundibulo-pelvic ligament, medial umbilical ligament, and umbilical artery are divided and ligated in the extraperitoneal space. Thirdly, the bladder is mobilized caudally and the vesico-vaginal space is exposed after completely dissecting off the vesical peritoneum. Fourthly, the ureter is isolated and mobilized laterally. Then, uterine vessels and parametria are divided and ligated, which is followed by colpotomy to access the recto-vaginal septum. By retracting the total specimen cranially, the Douglas pouch is dissected retrogradely according to Hudson procedure. Lastly, the peritoneum of the mesorectum and mesosigmoid is shaved at the pelvic brim. Therefore, using this method, almost all the pelvic visceral peritoneum was dissected (). In addition, we didn't intentionally expose the anatomical spaces (pre-vesical, para-vesical, para-rectal, and pre-sacral) completely, which was effective and time-saving.

Results. Complete removal of the disseminated tumors in both parietal and visceral peritoneum was achieved by the method introduced in our video.

Conclusion. Our method, modified from Hudson procedure, is effective for complete cytoreduction in selected ovarian cancer patients with extensive peritoneal carcinomatosis sparing rectosigmoid resection.

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Author contributions

Libing Xiang: Conceptualization, surgery, video editing, and writing manuscript; Shuang Ye: Conceptualization, surgery, video recording, and writing manuscript; Huijuan Yang: Conceptualization, project administration, surgery, and reviewing manuscript.

^{*} Corresponding author at: Department of Gynecologic Oncology, Fudan University Shanghai Cancer Center, Department of Oncology, Shanghai Medical College, Fudan University, Shanghai 200032, China.

E-mail address: huijuanyang@hotmail.com (H. Yang).

¹ Libing Xiang and Shuang Ye contributed equally to the manuscript.

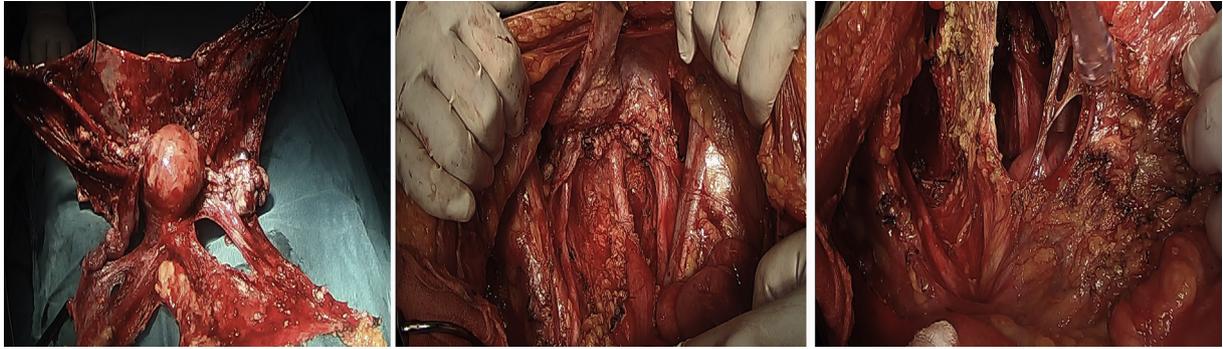


Fig. 1

Declaration of Competing Interest

The authors declare that they have no competing interests.

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