

Feasibility and efficacy of laparoscopic restaging surgery for women with unexpected ovarian malignancy



Jaeman Bae^a, Joong Sub Choi^{a,*}, Won Moo Lee^a, A. Ra Koh^a, Un Suk Jung^a, Jung Hwa Ko^b, Jung Hun Lee^c

^a Division of Gynecologic Oncology and Gynecologic Minimally Invasive Surgery, Department of Obstetrics and Gynecology, Hanyang University College of Medicine, Seoul, Republic of Korea

^b Department of Obstetrics and Gynecology, Kangwon National University Hospital, Chuncheon, Republic of Korea

^c Department of Obstetrics and Gynecology, MizMedi Hospital, Eulji University School of Medicine, Seoul, Republic of Korea

ARTICLE INFO

Article history:

Received 14 July 2014

Received in revised form 9 June 2015

Accepted 30 June 2015

Keywords:

Gynecology
Laparoscopy
Lymphadenectomy
Ovarian cancer
Restaging surgery

ABSTRACT

Objective: To evaluate the feasibility, surgical outcomes and complications of laparoscopic restaging surgery for women with unexpected ovarian malignancy.

Study design: We conducted a retrospective chart review of 14 women with unexpected ovarian malignancy who underwent laparoscopic restaging surgery including peritoneal washing cytology, laparoscopic pelvic and paraaortic lymphadenectomy up to the left renal vein level, omentectomy, and multiple peritoneal biopsies, and hysterectomy except three fertility saving surgery.

Results: The median age and median body mass index women were 49 years (range, 22–63) and 24.2 m/kg² (range, 18.9–25.3), respectively. The median operating time was 230 min (range, 155–370). The median numbers of harvested pelvic and paraaortic lymph nodes were 26 (range, 6–41) and 18 (range, 2–40), respectively. The median return of bowel activity was 28 h (range, 21–79). Four of the women were upstaged from the initial presumed stage. There were two intraoperative complications, laceration of the inferior vena cava and cisterna chyli rupture. There was one postoperative complication, port-site metastasis. There was no conversion to laparotomic surgery. The median follow-up period was 33 months. Thirteen of the patients have no evidence of recurrences, however one patient died after 22 months after the surgery.

Conclusion: Laparoscopic restaging surgery, performed by a specialized laparoscopic oncologist with sufficient laparoscopic experience and a well-trained operating team, is both feasible and effective in the management of unexpected ovarian malignancies.

© 2015 Elsevier Ireland Ltd. All rights reserved.

Introduction

Unexpected ovarian malignancy is the incidental finding of an ovarian cancer during or after surgery, in what was expected to be a benign tumor before surgery. Such unexpected ovarian malignancies are the most common reasons for inadequate surgical staging, and restaging interventions are great burdens for patients and doctors. Restaging surgery can be defined as completion of an incomplete procedure that was originally

conducted as primary surgery for a cancer, with the aim of obtaining knowledge about the stage of disease [1]. Staging surgery for ovarian cancers should include peritoneal washing cytology, total abdominal hysterectomy with bilateral salpingo-oophorectomy including intact tumor removal, retroperitoneal lymph node dissection, omentectomy and multiple peritoneal biopsies via a vertical long midline incision from the xiphoid process to the symphysis pubis [2].

Since 1994, there have been several studies on the feasibility, safety and oncologic outcome of laparoscopic-assisted staging surgery in treating patients with early ovarian cancers. These studies reported many advantages of laparoscopic-assisted staging surgery over established laparotomic staging surgery: better cosmesis; shorter hospital stay; less blood loss and need for analgesics; better visualization; more rapid recovery; earlier ambulation; shorter interval to adjuvant chemotherapy (if indicated); and faster return of

* Corresponding author at: Division of Gynecologic Oncology and Gynecologic Minimally Invasive Surgery, Full time faculty of the Department of Obstetrics and Gynecology, Hanyang University College of Medicine, 222 Wangsimni-ro Seongdong-gu, Seoul 133-791, Republic of Korea. Tel.: +82 2 2290 8416; fax: +82 2 2296 8472.

E-mail address: choiyjy1@hanyang.ac.kr (J.S. Choi).

bowel movements [3–6]. Similar results and advantages have been reported for laparoscopic debulking surgery in cases of advanced ovarian cancers [7,8]. There have not been many reports of restaging surgery and laparoscopic restaging surgery on patients diagnosed with an unexpected ovarian malignancy.

The objective of this study was to analyze the feasibility and efficacy of laparoscopic restaging surgery for unexpected ovarian malignancy.

Materials and methods

We conducted a retrospective chart review of 14 women with unexpected ovarian and tubal malignancy who underwent laparoscopic restaging surgery including peritoneal washing cytology, systemic laparoscopic pelvic and paraaortic lymphadenectomy up to the left renal vein level, omentectomy, and multiple peritoneal biopsies, and hysterectomy except two fertility saving surgery from January 2005 to June 2014. We reviewed clinical charts and analyzed the patients' data, including age, parity, body mass index (BMI), prior surgery, serum level of CA-125, estimated blood loss, operating time of the surgery, return of bowel activity (hours), time to adjuvant chemotherapy (days), complications, histopathological results, presence of upstaging, number of harvested pelvic and paraaortic lymph nodes, final FIGO stage, adjuvant chemotherapy, follow-up time, and current status.

The exclusion criteria for this study were: (1) peritoneal carcinomatosis; (2) distant metastasis (e.g., brain, lung, or bone); and (3) a low probability of optimal cytoreductive surgery (e.g., multiple liver metastases, metastasis of porta hepatis, pancreas, and abdominal wall). Informed consents were obtained from all patients before the surgery. All of 14 laparoscopic restaging surgeries were performed by one surgeon (Choi JS).

Surgical technique

After positioning the patient into the dorsal lithotomy position while under general anesthesia, we inserted a Foley catheter and uterine elevator (for those patients who wished to preserve fertility or who had not undergone hysterectomy in previous surgery). Monitors were placed on lines extending from each foot of the patient. We inserted a 12-mm trocar through a vertical infraumbilical incision to make a pneumoperitoneum without using a Veress needle. Second and third ancillary 5-mm trocars were inserted from outside both rectus abdominis muscles over an imaginary line in the transumbilical plane. A fourth trocar (12 mm) was inserted 3–4 cm above the symphysis pubis [9]. Peritoneal washing cytology was performed on all the patients. First, a 5-mm telescope was inserted through the umbilical trocar and the entire peritoneal cavity was observed carefully by rotating the telescope clockwise. Laparoscopic-assisted vaginal hysterectomy and bilateral salpingo-oophorectomy were performed except in three fertility-saving surgeries. Infracolic omentectomy and appendectomy were performed with a harmonic scalpel (Ultracision Harmonic Scalpel[®]; Ethicon Endo-Surgery, Inc., Cincinnati, OH) and an endoscopic stapler (Endoscopic Linear Cutter[®]; Ethicon Endo-Surgery, Inc., Cincinnati, OH) after performing laparoscopic pelvic lymphadenectomy and laparoscopic paraaortic lymphadenectomy to the infrarenal level (Fig. 1). Liver mobilization was needed to secure the visual field of the diaphragm and the falciform and triangular ligaments were dissected for this purpose. The method of removing the tumor was based on whether a hysterectomy was going to be performed. Of the fourteen patients who were referred to our department, five had already undergone hysterectomy. Seven of remaining nine patients underwent laparoscopically assisted vaginal hysterectomy (LAVH) and three patients underwent fertility-saving restaging surgery. An endobag (LapBag[®]; Sejong Medical, Seoul,

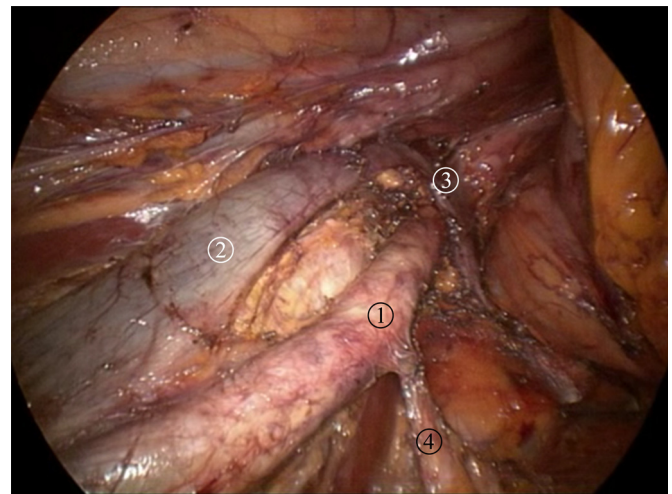


Fig. 1. Laparoscopic image after laparoscopic para-aortic lymphadenectomy. ① Abdominal aorta, ② inferior vena cava, ③ left renal vein, ④ inferior mesenteric artery.

Republic of Korea) was inserted and removed through the vaginal vault in cases involving hysterectomy during laparoscopic restaging surgery; it was inserted and removed at the 12 mm port site in fertility-saving surgeries.

After completing all the surgical procedures, we checked the status of peristalsis of both ureters and noted any bleeding. Drainage tubes were inserted via a 5-mm trocar on both sides.

Statistical analysis

Statistical analysis was performed using SPSS software (version 18.0 for Windows; IBM SPSS Statistics, IBM Corp., Armonk, NY). All data are expressed as medians and ranges.

Results

Patients' characteristics and surgical results are summarized in Table 1. The median age, parity, and BMI were 49 years (range, 22–63), 2 (range, 0–5), and 24.2 m/kg² (range, 18.9–25.3), respectively. The median operating time was 230 min (range, 155–370). The median return of bowel activity was 28 h (range, 21–79). Table 2 shows the oncologic outcomes of laparoscopic restaging surgery. The final histopathological results showed epithelial ovarian cancers in eleven (clear cell carcinomas in three, endometrioid adenocarcinomas in three, serous cystadenocarcinomas in two, mucinous cystadenocarcinomas in two, and transitional cell carcinoma in one), and adenosarcoma in the other patient. Dysgerminoma and fallopian tubal cancer were in each of remaining patient. The median numbers of harvested pelvic and paraaortic lymph nodes were 26 (range, 6–41) and 18 (range, 2–40), respectively. Four of the 14 patients were upstaged and no residual tumor was detected in 10. Six of the 14 patients received adjuvant chemotherapy. There was no conversion to laparotomy.

The median follow-up period was 33 months with no long-term complications. Thirteen of the patients are doing well up to the time of writing without evidence of relapse, but one patient died after 22 months because of lung metastasis. That patient was not one of those who underwent upstaging.

Comments

No malignancies can be ruled out on the basis of preoperative physical examination, ultrasonographic findings or serum levels of

Download English Version:

<https://daneshyari.com/en/article/3919334>

Download Persian Version:

<https://daneshyari.com/article/3919334>

[Daneshyari.com](https://daneshyari.com)