

Does resection of normal appearing omentum influence survival in patients with type 2 endometrial carcinoma?

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Background: Type 2 endometrial cancer (EC) includes high-grade endometrioid ECs and aggressive histologic subtypes such as serous, clear cell and carcinosarcoma of the endometrium. These tumors have a propensity for intra-abdominal spread, a high recurrence rate, and a poor prognosis. Therefore, the mainstay of treatment has been surgical debulking, which includes hysterectomy, bilateral salpingo-oophorectomy (BSO), lymph node dissection (LND) and omentectomy. However, the benefit of omentectomy, especially in early-stage disease in which gross omental metastasis is not observed, is debatable. Touhami et al ¹ have shown that the detection of microscopic disease in radiologically and clinically normal appearing omentum seems to be rare in serous EC. A study by Peled et al ² has shown that women that were preoperatively diagnosed with endometrioid EC and eventually found to have serous EC, and therefore did not undergo omentectomy, had no difference in overall survival or recurrence rates compared to women who underwent full staging.

Study aim: To determine whether resection of normal appearing omentum influences survival in women with type 2 EC.

Methods: We retrospectively identified cases with type 2 EC at our Gynecologic Oncology Division from 1998 to 2017. Medical records were reviewed for the following information: age at diagnosis, preoperative imaging, operative findings, surgical procedure, final histology with definitive FIGO stage, adjuvant treatment and survival.

Results: A total of 90 patients with type 2 endometrial cancer were identified, of whom 79 had primary operation. All women underwent at least hysterectomy with bilateral salpingo-oophorectomy. Patient's clinical and histological characteristics, as well as their pathologic characteristics, are shown in tables 1 and 2, respectively.

Characteristic	Number of pts (%)	
Histology		
Serous	39	49%
Carcinosarcoma	34	43%
Clear Cell	6	8%
Total	79	100%
Median Age		
Serous	73.16 ± 7.6	55.08-82.97
Carcinosarcoma	68.14 ± 10.7	35.24-84.21
Clear Cell	78.33 ± 17.9	39.72-91.1
Total	72.2 ± 10.1	35.24-91.11
Surgical procedure		
Hysterectomy + BSO	79	100%
Pelvic LND	61	77%
Omentectomy	63	80%
Stage		
I	32	41%
II	5	6%
III	23	29%
IV	19	24%

Characteristic	Number of pts (%)	
Depth of invasion		
<50%	36	46%
>50%	43	54%
LVSI		
No	54	68%
Yes	25	32%
Lymph node metastasis		
No	40	66%
Yes	21	34%
Omental metastasis		
No	49	78%
Yes	14	22%

Seventeen women (21.5%) were found to have macroscopic extrauterine disease, hence omentectomy was part of the operation and these patients were excluded from evaluation.

The final study group included 62 women with no macroscopic evidence of omental metastasis. 36 patients underwent omentectomy and had no histologic evidence of spread (group 1) compared to 26 women that did not undergo omentectomy (group 2). By multivariate analysis, survival was significantly influenced by stage, deep stromal invasion and lymph-vascular space involvement, but not by omentectomy. However, when only stage I patients (n=32) were analyzed, the median survival of women who did not have omentectomy (n=16) was 7.8 ± 0.4 years while the median survival of the women who underwent omentectomy (n=16) was not yet reached (graph 1).

Graph 1: Kapan-Meier Survival Curve of 32 patients with Stage I type 2 EC; patients in blue (n=16) underwent omentectomy, whereas patients in green (n=16) had no omentectomy performed

Conclusion: It appears that the resection of normal appearing omentum later found to have no metastases may improve survival in patients with stage I type 2 aggressive endometrial cancer

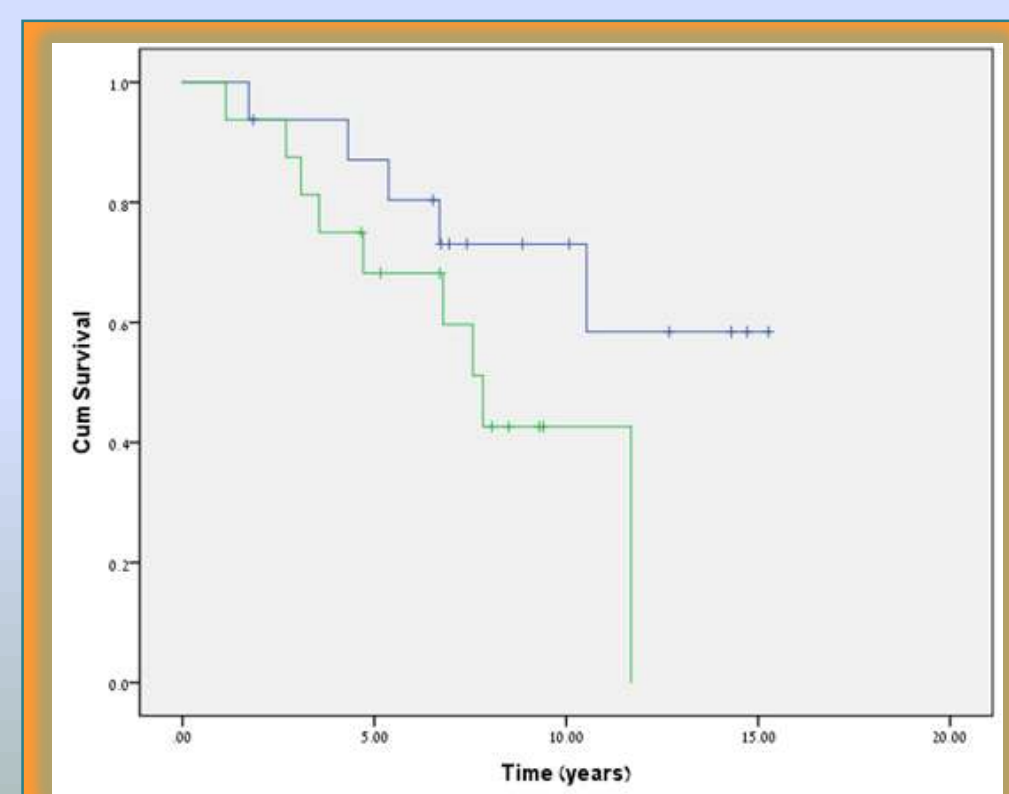


Table 1 (left): Histological and clinical patient characteristics

Table 2 (above): Pathologic characteristics

- Touhami O, Trinh X, Gregoire J, et al. Is a More Comprehensive Surgery Necessary in Patients With Uterine Serous Carcinoma? *International Journal of Gynecologic Cancer* 2015;25:1266-1270
- Peled Y, Aviram A, Krissi H, et al. Uterine papillary serous carcinoma pre-operatively diagnosed as endometrioid carcinoma: Is omentectomy necessary? *Aust New Zeal J Obstet Gynaecol.* 2015;55(5):498-502