The role of complete staging surgery for pure endometrioid-type endometrial cancer

Uterine cancer is one of the most common malignancies in women, especially in Western countries and Taiwan. Traditionally, uterine cancers, including endometrial cancer and sarcoma are managed and staged surgically and postoperative multiple-modality treatment might be needed in the high-risk population. Uterine cancer is further separated into two distinguished histological subtypes—type 1 endometrioid histology and type 2 non-endometrioid histology, such as serous, clear cell and carcinosarcoma. Uterine sarcoma contains two major types of tumors, and one is leiomyosarcoma and the other is uterine endometrial stromal sarcoma. It is well-known that FIGO (the International Federation of Gynecology and Obstetrics) stage is the single and most important prognostic factor to predict outcomes of patients with endometrial cancer. The status of lymph node metastases is the most important determining factor to distinguish the early- and late-stage endometrial cancer (presence of pelvic and/or para-aortic lymph node metastases upgrade the FIGO stage from I to III), contributing to the need to evaluate the status of pelvic and para-aortic lymph node. Therefore, National Comprehensive Cancer Network (NCCN) guideline, including ours highly recommended that all patients with endometrial cancer should receive a complete and thorough staging surgery, in which lymphadenectomy (lymph node sampling and/or dissection) is included. This standard surgical approach for endometrial cancer is well-known. Sometimes, endometrial cancer was diagnosed accidentally and these patients were supposed as benign diseases, such as uterine fibroids, adenomyosis, and heavy menstrual bleeding preoperatively. After treatment, for example, simple total hysterectomy or dilatation and curettage, the diagnosis of uterine cancer was made. For these patients, many do not receive a further complete staging surgery. However, prognosis of these patients seems to be very good, which raised the question whether the complete and thorough staging surgery is really needed for all patients of endometrial cancer. As shown above, lymphadenectomy is a critical procedure for complete and thorough staging surgery. Because of a significant increase of morbidity and possible absence of survival benefits after lymphadenectomy for these patients (carefully and highly selected population), the role of lymph node dissection is always on discussion, especially for those patients who are considered as low-risk population, including younger women, grade 1 or 2 pure endometrioid subtype endometrial cancer, and minimally or less than 1/2 myometrial invasion. This debated issue needs more discussion. In this issue of the Journal of Chinese Medical Association, we are happy to learn Comert’s group tried to address this topic. The authors retrospectively evaluated 323 women with pure endometrioid-type endometrial cancer confined to the uterine corpus to determine the efficacy of lymphadenectomy. By the way, the authors also tried to evaluate the therapeutic efficacy of postoperative adjuvant radiotherapy. As expected, more than 80% of patients have been treated with lymphadenectomy; however, it is unusual that half of patients received postoperative adjuvant radiotherapy in their study. There was no statistically significant difference of overall 5-year disease free survival between patients with and without lymphadenectomy. The benefits of lymphadenectomy were found in the 5-year disease-specific survival for entire cohort study, and the certain group (FIGO IB and ≥ grade 2). The authors also found that the postoperative radiotherapy did not provide any survival benefit.

In fact, the role of lymphadenectomy was emphasized in our previous study, although the study population is significantly different. In the management of women with FIGO III–IV pure endometrioid-type endometrial cancer, combination of complete staging surgery (complete dissection of pelvic lymph node and para-aortic lymph node is included) could provide the better chance for progression-free (hazard ratio [HR] 0.27, 95% confidence interval [CI] 0.16–0.45) and overall survival (HR 0.14, 95% CI 0.08–0.26), suggesting the important role of lymphadenectomy in the management of pure endometrioid-type endometrial cancer, regardless early-stage (FIGO I in the Comert et al.’s study) or advanced-stage (FIGO III–IV) endometrial cancer is. By contrast, the role of adjuvant radiotherapy for endometrioid-type endometrial cancer is always debated. Many have tried to discuss this topic, including the American Society for Radiation Oncology (ASTRO) guideline and the American Society of Clinical Oncology (ASCO) Endorsement Panel. There is no doubt that adjuvant radiation therapy is not needed for women without residual disease in the hysterectomy specimen and for women with grade 1 or 2 cancer and...
<50% myometrial invasion, especially when no other high-risk features are present. It is interesting that ASCO Endorsement Panel added qualifying statements to the ASTRO recommendations to provide stronger statement in favor of chemotherapy (with and without radiotherapy). Dr. Comert’s study showed that two-thirds of recurrent patients had distant recurrence, which is a big therapeutic challenge, suggesting that attempts to local control of endometrial cancer might not be enough to provide the survival benefits of these patients.

In fact, Taiwan’s experience showed the use of postoperative adjuvant chemotherapy for endometrial cancer, not only for endometrioid type but also for serous type. We found that postoperative adjuvant paclitaxel-based chemotherapy can provide the patients with better chance to survive (HR 0.61, 95% CI 0.79–0.92 for progression-free survival and HR 0.48, 95% CI 0.31–0.75 for overall survival).

In conclusion, there might be no doubt of the benefits of complete resection of the tumor for the survival of patients with endometrioid-type endometrial cancer. By contrast, for those patients with endometrioid-type endometrial cancer, especially FIGO I, the role of postoperative adjuvant therapy, either by chemotherapy, radiotherapy or by combination is still controversial. We are looking forward to seeing more studies to address this topic.

Conflicts of interest

The authors declare that they have no conflicts of interest related to the subject matter or materials discussed in this article.

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