

Consolidated Methodology Treatment in the Adjuvant Treatment of Uterine Serous Carcinoma

Allec M. Block and William Small*

Department of Radiation Oncology,
Loyola University, Chicago, IL, USA

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Description

Uterine Serous Carcinoma (USC) represents a clinically aggressive and highly malignant endometrial cancer. Initially distinguished from other types of primary endometrial adenocarcinoma in 1982, [1] performed a pathologic review of 256 stage I endometrial cancers treated at Stanford University, with 26 of the cases revealing USC. Of these cases, 40% had deep myometrial invasion compared to 12% of typical adenocarcinomas. With deep invasion, relapse rates for USC were 63% compared to only 30% for adenocarcinomas. As a whole, 50% of the USC patients recurred, with most recurrences occurring on peritoneal surfaces in the upper abdomen. The authors concluded that this type of pattern of spread was similar to ovarian cancer and should be treated as such with either upper abdominal and pelvic radiotherapy or chemotherapy [1].

Several retrospective studies have suggested a benefit to adjuvant chemotherapy specifically in USC, although in the absence of randomized evidence, the impact of chemotherapy remains widely unknown. In a retrospective, multi-institutional study of 142 stage I USC patients treated with platinum and taxane based adjuvant chemotherapy, found five year progression free and cause specific survival benefits compared to adjuvant radiation alone or observation [2]. Similarly improvement in overall survival with taxane based adjuvant chemotherapy compared to those who did not receive chemotherapy in a retrospective review of 135 patients of all stages with USC [3].

To further evaluate the benefits of adjuvant radiation and systemic therapy, the Albert Einstein group conducted a phase 2 trial of pelvic radiation “sandwiched” between taxane and platinum based chemotherapy. Eighty-one patients with USC were enrolled in the study, in which patients were treated with 3 cycles of paclitaxel and carboplatin, followed by pelvic external beam radiation therapy and vaginal brachytherapy, followed by 3 additional cycles of chemotherapy. For stages I–II, overall survival at 3 years was 84%, compared to 50% for stages III–IV. Authors concluded that this method was well tolerated; however, overall survival outcomes were similar to historical controls [4].

In this issue of Journal of Gynecologic Oncology, report their results of their review of the Surveillance, Epidemiology, and End Results (SEER) program 2000–2009, in which the authors investigated the impact on survival of external beam radiation therapy in stages I–IV USC patients who also received adjuvant

chemotherapy [5].

Although there have been no randomized trials dedicated to patients with USC, several trials have included patients with this variant. These have suggested that the benefit of chemotherapy alone is modest. Gynecologic Oncology Group (GOG) 249 study was a phase 3 randomized trial comparing adjuvant pelvic radiation therapy versus vaginal cuff brachytherapy followed by taxane/platinum chemotherapy. This study included 601 patients with high risk, early stage endometrial cancer, in which 15% of the cohort consisted of stages I–II USC. At 24 months, preliminary data presented in 2014 reported no difference in recurrence free or overall survival between the two adjuvant treatment strategies [6]. These data suggest, although with short follow-up thus far, that chemotherapy was not superior to adjuvant pelvic radiation. Similarly, the Nordic Society of Gynecologic Oncology/European Organization for the Research and Treatment of Cancer (NSOG-9501/EORTC 55991) trial randomized patients to adjuvant pelvic radiation therapy plus or minus sequential chemotherapy [7]. This study included 141 stages I–III USC and clear cell carcinoma patients, and for this subset of patients with high risk histologies, progression free survival at 5 years was equivalent in both study arms, suggesting a lack of benefit of sequential chemotherapy to adjuvant radiation therapy.

In summary, we agree with the conclusion drawn from the authors’ well written and well analyzed SEER database review of adjuvant treatment strategies for USC—this review validates the findings of previous studies and suggests that the improved local control achieved with external beam radiation may translate into improved survival for some patients. USC remains an

***Corresponding author:** William Small,
Department of Radiation Oncology,
Loyola University, Chicago, IL, USA, E-mail:
williamsmall@gmail.com

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uncommon, but highly malignant and clinically aggressive form of endometrial cancer. The adjuvant treatment of this entity remains controversial, and individual cases should be routinely discussed in a multidisciplinary setting in order to guide patient care [5].

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