Extent of lymph node dissection and overall survival in patients with uterine carcinosarcoma, papillary serous and endometrioid adenocarcinoma

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Objectives

To evaluate the interaction between extent of lymph node dissection (LND) and overall survival (OS) in patients with various histologic types of uterine cancer.

Methods

We retrospectively identified 834 patients who had primary surgery in our institution for uterine carcinosarcoma (MMMT), papillary serous (UPSC) or endometrioid carcinoma (EC) between 1984 and 2009. Stage, grade, total lymph node count (LNC), positive LNC, adjuvant therapy, age, race and OS were collected. OS was calculated using the Kaplan-Meier method. Predictive factors were compared with the log rank test and Cox regression analysis.

Results

Our cohort included 158 patients with MMMT, 115 patients with UPSC and 561 patients with EC. Of the cohort, 38% of the patients had Stage I disease, 20% had Stage II and 22% had Stage III or IV disease. LND was performed in 68% of patients with MMMT, 79% of patients with UPSC and 73% of patients with EC. Of the cohort, 38% of the patients had Stage I disease, 20% had Stage II and 22% had Stage III or IV disease. LND was performed in 68% of patients with MMMT, 79% of patients with UPSC and 73% of patients with EC.

Survival by histology, p<0.001

In patients with stage III and IV disease who had LND, the rate of positive LN was higher in UPSC (29%) and MMMT (19%) as compared to EC (15%) (p<0.001). In the group with positive LNC, a moderately positive association between the total and positive LNC was present (Pearson coefficient 0.34, p<0.001).

Survival by total LN count. The 0 nodes quartile differed from all others (p<0.001), the other quartiles did not differ significantly from one another (p>0.25).

Conclusions

In our cohort, the performance of LND is associated with improved OS. The extent of the LND is inversely correlated with the risk of death for the first 2 years. This effect was independent of stage, histology, type of adjuvant treatment, age and race.

Graphs and tables are not included in the text, but the data and analysis are presented in a clear and structured manner.