

Poster 17: Do the Peters criteria hold up for adenocarcinoma? A retrospective database study evaluating the effect of histology on outcomes in surgically-treated high-risk early stage cervical cancer

Danielle Greenberg, MD – University of California, Irvine

Topic: Cervical

Objectives

The aim of this study was to assess the effect of histology on the response to adjuvant treatment in patients with early stage, surgically-treated high-risk cervical cancer as defined by the Peters criteria.

Methods

The National Cancer Database (NCDB) database was queried for women with stage 1a2-2a squamous cell carcinoma (SCC) and adenocarcinoma (AC) of the cervix who underwent radical hysterectomy with complete lymphadenectomy and qualified as high-risk as defined by the Peters criteria: the presence of positive margins, parametrial invasion, or positive lymph nodes. The primary outcome was overall survival (OS). Multivariate analyses (MVA) using proportional hazards model was used to investigate the prognostic significance of histological subtype on the response to adjuvant treatment.

Results

A total of 1,734 patients met inclusion criteria including 1,273 patients with SCC (73%) and 461 patients with AC (27%). AC was associated with worse OS in all patients ($p=0.004$, HR 1.38, CI 1.11-1.73). In subset analysis, among patients who received radiation and chemotherapy (CCRT), patients with AC had significantly worse OS than patients with SCC ($p=0.041$, HR 1.35, CI 1.01-1.79). There was no difference in OS between patients with AC and SCC who received no treatment or radiation (RT) only. On MVA of all patients meeting Peters criteria regardless of histology, there was no significant difference in OS between patients who received no treatment versus CCRT, RT, or chemotherapy (CT). Within-cohort MVA of patients with AC demonstrated no relationship between OS and CCRT, RT, or CT versus no treatment. Similarly, no difference in OS was found in a within-cohort analysis of SCC between patients who received CCRT, RT, or CT versus no treatment.

Conclusions

AC histology appears to be a significant prognostic factor in surgically-treated high-risk early stage cervical cancer. However, in all patients with high-risk disease regardless of histology, adjuvant treatment with CCRT was not associated with improved OS in our cohort, contrary to prior studies. These results cannot be attributed to the effect of histology, as this finding persisted in the SCC cohort alone. We suggest further investigation is needed to assess the external validity of the Peters criteria.

Abstract Table or Graph

SPAZFWFX-1515369-1-ANY.pdf