

## Small Cell Carcinoma of the Uterine Cervix: A Single-Center Experience

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**Background:** Small cell carcinoma of the uterine cervix (SCCUC) is a rare and aggressive malignancy of neuroendocrine origin. Given the rarity of this cancer, the optimal treatment remains uncertain. We report our experience with 36 cases seen at the University of Iowa between 1977 and 2009.

**Methods:** Cases were identified by searching our institutional database. Patients (pts) with pathology-confirmed SCCUC were included. Other histologies were excluded.

**Results:** We identified 36 cases where follow-up information was available. The median age of pts was 49 years (range 26 – 77). FIGO staging was IB1 for 14 pts (39%), IB2 for 3 pts (8%), II for 7 pts (19%), and 12 pts (34%) had stage III or higher. Fifteen pts (44%) underwent resection, 20 pts (56%) had radiation therapy (RT) and 27 pts (82%) received chemotherapy. The median survival (MS) for the entire cohort was 22.6 months with a 24% 5-year overall survival (5-OS). Stage was a strong predictor of survival. Patients deemed resectable (stage IB1 or less) had an improved MS and 5-OS compared to pts of higher stage (MS 42 vs. 11.1 months,  $p=0.008$ , 47 vs. 6% respectively). RT did not seem to improve survival (MS 16 months for RT vs. 23 months for no RT,  $p=0.6$ ). Of the 15 resected patients, 7 recurred after a median time of 14 months from diagnosis and all but one patient died.

**Conclusion:** SCCUC is a rare malignancy with poor overall prognosis. Patients with advanced disease had the shortest MS and

5-OS. Surgery in early stages provided the best chance to increase survival. RT was not associated with improved survival in this study, but the impact of chemotherapy could not be clearly defined. Further exploration of the biology of this aggressive tumor, and search for possible prognostic factors, most likely on molecular level, is required.