Poster 3: Clinicopathologic characteristics and survival outcomes in women with endometrial neuroendocrine tumors

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Topic
Endometrial

Objectives
Endometrial neuroendocrine tumors (ENET) are rare (0.8% of endometrial cancers) and aggressive; they are often diagnosed at an advanced stage with no standardized treatment guidelines. This study provides data on the clinicopathological features and survival outcomes of ENETs.

Methods
This IRB-approved retrospective cohort study evaluated patients with histology-confirmed ENETs treated at a single institution between 1994 and 2024. Descriptive statistics were used to summarize clinicopathologic features. PFS was defined as the time from the first treatment to recurrence, progression, or death. OS was defined as the time from the first treatment to death or last contact. Kaplan-Meier was used to estimate OS and PFS. Cox regression was used to assess HR for prognostic factors.

Results
97 patients were included. Median age at diagnosis was 60 years (range: 30–85). Median BMI was 30.3 kg/m^2 (range: 17.1–76.7). 87% were white. FIGO stage at diagnosis: 31% stage I/II, 62% stage III/IV, and 5% unknown. 84% underwent primary surgery and 16% had neoadjuvant chemotherapy. 59% received adjuvant therapy (AT); 30% were treated with chemotherapy (CT) and 29% with radiation +/- chemotherapy (CRT). 39% were NED after primary treatment, 38% progressed, and 23% recurred. Median follow-up was 1.4 years (range 6 days–15.7 years). Median PFS was 0.8 years (95% CI: 0.6–1.3). On multivariable analysis, CT (HR = 0.33, 95% CI: 0.19–0.59, p = 0.0001) or CRT (HR = 0.25, 95% CI: 0.14–0.45, p < 0.0001) decreased recurrence risk vs no AT. Stage I/II patients treated with CRT had a reduced risk of recurrence vs no AT (HR = 0.28, 95% CI: 0.10–0.77, p = 0.0134), while CT showed no benefit (HR = 0.63, 95% CI: 0.21–1.87, p = 0.4015). Median OS was 1.6 years (95% CI: 1.2–3.0). On multivariable analysis, CT (HR = 0.34, 95% CI: 0.19–0.60, p = 0.0002) or CRT (HR = 0.22, 95% CI: 0.12–0.42, p < 0.0001) decreased mortality risk vs no AT. Stage I/II patients treated with CRT had a reduced risk of death vs no AT (HR = 0.16, 95% CI: 0.05–0.51, p = 0.0019), while CT showed no benefit (HR = 0.37, 95% CI: 0.10–1.41, p = 0.1459). Table 1 summarizes survival outcomes of Stage III/IV patients.

Conclusions
Adjuvant therapy after surgery improved survival outcomes in ENET patients, with radiation +/- chemotherapy showing the greatest benefit in recurrence and mortality.

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