**Abstract**

**Purpose:** To compare clinical characteristics, surgical and oncologic outcomes of clear cell ovarian cancer among patients with cancer arising from endometriosis, cancer coexisting with endometriosis, and cancer without endometriosis.

**Methods:** A retrospective chart review of patients diagnosed with clear cell ovarian cancer during January 1998-March 2013 was performed. All histopathology specimens were reviewed by a gynecologic pathologist and classified into one of the three following endometriosis status groups: arising group, coexisting group, or without group. The primary outcome was disease-specific survival (DSS). The secondary outcomes were progression-free survival, surgical morbidities, response rate, recurrence rate, and cancer-specific death.

**Results:** Finally, 249 patients were included. There were 82, 96, and 71 patients in the arising, coexisting, and without groups, respectively. Regarding baseline characteristics among groups, the without group was significantly older and had more advanced diseases. There was a significant difference in progression-free survival between the arising group and the without group (p = 0.003). Five-year progression-free survival rates were 62.8% in the arising group, 50.2% in the coexisting group, and 38.3% in the without group. DSS was not significantly different among groups. Multivariate analysis revealed ovarian surface invasion (HR = 2.76) and pelvic lymphadenectomy (HR = 0.39) to be independent prognostic factors for progression-free survival, whereas no remission after primary treatment (HR = 8.03) and pelvic lymphadenectomy (HR = 0.21) were prognostic factors for DSS. Intraoperative blood loss and residual tumor were significantly higher in the without group.

**Conclusions:** Endometriosis status was found not to significantly influence surgical and oncologic outcomes in patients with clear cell ovarian cancer.