Adenocarcinoma as an independent risk factor for early-stage intermediate-risk cervical carcinoma

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Objective: The observation arm of GOG 92 showed that the probability of recurrence was higher for cervical adenocarcinoma than for squamous cell cancer (SCC). Adjuvant radiation therapy appeared to benefit adenocarcinoma more than SCC, but the number of subjects with adenocarcinoma was small. This analysis will examine recurrence probability among subjects with IB adenocarcinoma who received no adjuvant treatment to determine whether histology should be considered as an intermediate-risk factor.

A retrospective review was performed of patients with stage IB cervical adenocarcinoma treated with hysterectomy and lymphadenectomy at two institutions between 1990 and 2007. Inclusion was limited to those with negative parametria, margins and lymph nodes who received no postoperative treatment. Subjects who met intermediate-risk criteria based on GOG 92 were also excluded. Subjects with one intermediate-risk (IR) factor, including positive lymphovascular space invasion (LVSI), tumor size > 4 cm, or middle-/outer-third invasion, were compared with subjects with no risk (NR) factor. Fisher's exact test and the Cochran–Armitage trend test were used to compare recurrence risk among pathologic factors.

Results: We identified 91 patients with stage IB cervical adenocarcinoma with negative parametria, margins, and lymph nodes who did not receive postoperative treatment. The median age was 40 years, median follow-up was 3.1 years and 34 of 91 patients had an IR factor. The risk of recurrence was 5.9\% (2/34) in the IR group and 1.7\% (1/57) in the NR group (0.553). The relative risk of recurrence was 16.2 times higher (CI = 1.61–163.01, \( P = 0.031 \)) among subjects with LVSI (2/10) than among those without LVSI (1/81). Only two subjects were identified with tumor size greater than four cm; neither recurred. There was no association between depth of invasion, categorized as < 33, 33–66, and > 66\%, and recurrence (\( P = 0.509 \)).

Conclusions: The overall risk of recurrence was small in our population compared with a 40\% risk of recurrence in GOG 92 for patients with intermediate-risk cervical adenocarcinoma who received no postoperative treatment. The risk demonstrated in our population does not warrant the adverse effects associated with postoperative radiation, and we do not recommend considering adenocarcinoma as an independent criterion for intermediate-risk cervical cancer. Specific pathologic combinations, such as positive LVSI and adenocarcinoma, may confer a high risk of recurrence and be worthy of future consideration.