CONCURRENT CHEMORADIOTHERAPY COMPARED WITH RADIOTHERAPY ALONE IN INTERMEDIATE-RISK STAGE IB-IIA CERVICAL CANCER AFTER HYSTERECTOMY AND PELVIC LYMPHADENECTOMY

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Background: Postoperative concurrent chemoradiation therapy (POCCRT) has been proved superior to postoperative radiotherapy alone (PORT) in high risk cervical cancer patients by SWOG 8797. However, no one examined the benefit of POCCRT in intermediate risk cervical cancer patients.

Purpose: To evaluate the benefit and toxicity of POCCRT in patients with intermediate-risk factors after radical hysterectomy and pelvic lymphadenectomy in FIGO stage IB-IIA cervical cancer as compared with PORT.

Methods: Between January 1990 and December 2007, 100 cervical cancer patients without high risk factors (lymph node metastasis, involved resection margin, and/or parametrial invasion) but with 2 or more of intermediate risk factors (deep stromal invasion, lympho-vascular space invasion, and large tumor diameter (< 4 cm)) underwent adjuvant radiation therapy with (n = 50) or without concurrent chemotherapy (n = 50). All patients received external beam radiotherapy with 50.0 - 50.4 Gy (median 50.4 Gy) to whole pelvis. The median follow-up time of POCCRT and PORT group were 5.4 and 9.4 years, respectively.

Results: Five-year overall survival (OS) and progression-free survival (PFS) of POCCRT vs. PORT group were 100% vs. 87% ($p = 0.012$) and 94% vs. 83% ($p = 0.039$), respectively. Pelvic failure-free rate (PFFR) was also better in POCCRT group ($p = 0.046$). Distant metastasis-free rate was not different significantly ($p = 0.199$). Acute grades 3 and 4 hematologic toxicity was more frequent in the POCCRT group ($p < 0.001$). However acute grades 3 and 4 gastrointestinal (GI) and chronic toxicity were not different between two groups.

Conclusions: The addition of concurrent chemotherapy to PORT showed improved OS, PFS, PFFR without increasing acute GI and chronic toxicities in patients with intermediate-risk factors after radical surgery for stage IB-IIA cervical cancer.