

POSTOPERATIVE RADIATION THERAPY IN PATIENTS WITH PATHOLOGIC RISKS OF STAGE IB TO IIA CERVICAL CARCINOMA

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Purpose : To investigate the prognostic impact of pathologic risk factors and failure patterns in patients with stage IB to IIA cervical carcinoma treated with postoperative adjuvant pelvic irradiation.

Material and Method : Between April 1991 to December 2000, 130 patients with FIGO IB to IIA carcinoma of the cervix were treated with radical hysterectomy, bilateral pelvic lymphadenectomy and postoperative radiation therapy. Nineteen patients received systemic chemotherapy. All the patients had at least one of the following pathologic risk factors: 1. positive pelvic nodal metastasis, 2. multiple positive lymph nodes, 3. parametrial invasion, 4. vascular space invasion, 5. positive surgical margin, 6. bulky tumor size > 4 cm, 7. multiple pathologic risk factors. The radiation dose delivered to the whole pelvis range from 41-54 Gy in 1.8 Gy fractions. One hundred twenty-four patients received 2.5-21.5 Gy intracavitary brachytherapy.

Results : The patients were followed for a median of 57.9 months (range: 4.1 - 129.9). The 5-year overall survival and disease free survival rate were 76.5% and 76.1%, respectively. A total of 29 (22.3%) patients developed recurrence. Six recurrences were in the pelvis alone. Sixteen patients recurred only at sites outside the pelvis. Seven patients had both pelvic and distant recurrences. We demonstrated that only vascular space invasion had significant effect on disease free survival by univariate analysis ($p = 0.05$). Vascular space invasion and multiple pathologic risk factors were significantly correlated with higher incidence of distant metastasis. ($p = 0.05$ and $p = 0.02$, respectively). In multivariate analysis of these factors showed that only vascular space invasion remained significant risk factors ($p = 0.05$). Therapeutic complications occurred in 20 (15%) patients, including gastrointestinal in 12 (9%) patients or genitourinary in 8 (6%) patients. The overall 5-year complication-free rate was 91%. Ten (8%) of those patients had grade 3 and 4 late morbidity.

Conclusion : Our study suggested that postoperative radiotherapy after radical hysterectomy give reasonable survival in early stage carcinoma of the cervix. Poor survival and higher incidence of distant metastasis were observed if presence of vascular space invasion or multiple pathologic risk factors.

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