Conventional chemoradiation with Cisplatin Versus hemoradiation with Cisplatin plus Gemcitabine in uterine cervical cancer

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Abstract

**Background and Objective:** Due to high mortality and morbidity of the cervical cancer we decided to compare benefits and advers effects of Gemcitabine plus conventional chemoradiation with conventional chemoradiation with cisplatin alone in Imam Hossein hospital, in Tehran, Iran.

**Materials and Methods:** This double blind clinical trial, was carried out on 34 patients with documented cervical carcinoma during 2006-07 the patients divided into two sub groups: (A) Conventional concurrent chemoradiation with cisplatin (N=18) versus (B) concurrent chemoradiation with cisplatin plus gemcitabine (N=16). The patients with clinical stage of IB2-IVA and normal cell blood count with normal renal and liver function tests included in the study. Irradiation was delivered to all patients through external and internal beams with same dose and schedule. The patients followed for 3 months at least. Clinical response rate and adverse events included Neutropenia, Thrombocytopenia, anemia, diarrhea, nausea, and vomiting compared in two groups with fisher exact test, and t-test.

**Results:** Despite increasing of complete response rate with adding gemcitabine to conventional treatment (81.2% vs. 66.7%), the difference in two groups was not statistically significant.

**Conclusion:** This study indicated that the addition of gemcitabine to conventional chemoradiation with cisplatin revealed no significant benefits. All adverse events in combination chemotherapy group were greater than conventional treatment.

**Keywords:** Cervical cancer, Chemoradiation, Cisplatin, Gemcitabine

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