

Failure Pattern in Gastric Cancer After Surgery and Chemoradiotherapy: Radiation Oncologist'S View

Department of ¹Radiation Oncology, ²Surgery and ³Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea

DH Lim¹, DY Kim¹, MK Kang¹, YI Kim², WK Kang³, S Kim², JH Noh², JW Joh², SH Choi², TS Sohn², JS Heo², CH Park³, JO Park³

Purpose: To analyze the patterns of failure and to evaluate the role of radiotherapy in patients with gastric adenocarcinoma after gastrectomy plus adjuvant chemoradiotherapy.

Materials/Methods: A clinical protocol study of adjuvant chemoradiotherapy after gastrectomy was done to 291 patients. Chemotherapy included five cycles of 5-fluorouracil plus leucovorin, and radiotherapy was done with a dose of 4,500 cGy. During the follow-up period, the first site of recurrence was divided according to radiation field such as in-field recurrence (local recurrence and regional recurrence) or out-field recurrence (distant metastasis). The median follow-up period was 48 months.

Results: The 5-year overall survival rate was 62% and 39% of the patients (114/291) relapsed. Local recurrence occurred in 20 patients (7%), and regional recurrence and distant metastasis developed in 35 (12%) and 101 (35%), respectively. When the recurrent site was analyzed with respect to radiation field, in-field recurrence was 16% and represented 35% of all recurrences.

Conclusions: Our results suggest that adjuvant chemoradiotherapy has a potential effect on reducing locoregional recurrence. Moreover, low locoregional recurrence rates could give a clue as to which subset of patients could be helped by radiotherapy after gastrectomy. However, in order to draw a conclusion on the role of adjuvant radiotherapy, a randomized study is needed.