TREATMENT OUTCOME OF NEOADJUVANT CHEMORADIOTHERAPY FOR ESOPHAGEAL SQUAMOUS CELL CARCINOMA IN OUR INSTITUTION

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Purpose *:* In this retrospective study, we evaluated the treatment outcome following neoadjuvant chemoradiotherapy for esophageal cancer and the impact of tumor regression and post operative nodal status.

Materials and Methods *:* Sixty-four patients of esophageal cancer treated with neoadjuvant chemoradiotherapy from June, 1999 to April, 2011 were followed retrospectively. Tumor regression grade (TRG), post operative nodal status, pathologic stage, pattern of recurrence and overall survival (OS) of these patients were recorded and analyzed. Disease-free and overall survival rates were calculated with Kaplan-Meier method and group comparisons were based on the log-rank test. Cox regression analysis was the method applied when several factors were assessed simultaneously.

Results *:* Median survival is 24.2 months (range, 3-92 months). Comparing TRG 1 with TRG 2-4, the OS was not significantly different ($P= 0.549$). When TRG1-2 was compared with TRG3-4, there was a trend of significant difference in OS ($P= 0.089$). The median survival was 23.6 months in the N– group, compared with 13.5 months in the N+ group ($P< 0.001$). In univariate survival analysis, N+ ($P< 0.001$) and vascular involvement ($P= 0.041$) significantly influence survival probabilities. N+ was significantly ($P= 0.001$) associated with distant metastasis and TRG 3-4 ($P= 0.008$) with locoregional recurrence. By multivariate analysis, only N+ significantly influence OS ($P= 0.004$) and vascular involvement ($P= 0.658$) was not significant.

Conclusion *:* For those who are receiving neoadjuvant chemoradiotherapy, achieving node-negative status is a significant prognostic factor for the outcome. As for histomorphologic tumor regression, it has a less predictive factor.

[Therapeut Radiol Oncol 2013; 20(3): 171-178]

Key words: Esophageal cancer, Neoadjuvant chemoradiotherapy, Tumor regression grade