

Introduction

Considering the rapid proliferation of the lung cancer, delivery of a high dose of radiotherapy within a relatively short period increases the tumor control. At the same time, for years, a method within RT courses is being investigated, that would also decrease radiotherapy toxicity.

Objectives

The aim of this study is to compare the results of treatment response, survival results and side-effects between split-course radiotherapy (SCRT) and standard radiotherapy (STRT) in patients with stage IIIA - IIIB lung tumor

Methods

Between January 2004 and March 2005, 59 patients who had radiotherapy with a diagnosis of stage IIIA and IIIB lung cancer were retrospectively reviewed. Twenty-nine patients had SCRT, whereas 30 patients was studied after STRT. Mean follow-up period was 22.6 months.

Results

There was no difference between two groups in overall survival(15.0 months vs 12.8 months, $p:0.97$) and disease-free survival(7.7 months vs 6.6 months, $p:0.83$). Response to treatment(complete response) was observed in 27.5%($n=6$) of the patients in SCRT arm, whereas it was observed in 56.5%($n=13$) of the patients in STRT group, $p:0.046$. Patient performance status was worse in the SCRT arm($p:0.01$). Grade 2-3 leucopenia was more frequent in the STRT group, $p:0.046$. The rate of dysphagia was found to be similar in both groups($p:0.94$)

Conclusions

The effects of SCRT and STRT on the survival were similar at stage IIIA-IIIB lung cancer. STRT was observed to be more potent when tumor response to treatment is considered but side effects such as leukopenia are seen more frequently in the STRT arm. The rate of disphagia is similar in both groups.