

DEFINITIVE RADIOTHERAPY FOR THE PATIENTS WITH PROSTATIC ADENOCARCINOMA: ANALYSIS OF SHORT-TERM OUTCOME AND PROGNOSTIC FACTORS

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Purpose : This study is a retrospective analysis to evaluate the short-term outcome and prognostic factors of patients with prostatic adenocarcinoma and receiving definitive radiotherapy (RT).

Methods and Materials : From 1994 through 2001, 67 patients with adenocarcinoma of prostate underwent definitive RT with or without neoadjuvant hormone therapy or adjuvant hormone therapy at Koo Foundation Sun Yat-Sen Cancer Center, Taipei, Taiwan. One 83-year-old patient was excluded for the grade 3 gastrointestinal toxicity and incomplete RT. The median dose to whole pelvis or seminal vesicle/prostate was 46 Gy in a daily fraction of 1.8-2.0 Gy. The median dose to the prostate was 70 Gy. The neoadjuvant hormone therapy was given to 49 patients, usually starting 1- 3 months before the initial date of RT. The survival outcome was estimated by Kaplan-Meier method. The analysis of prognostic factors on survival was calculated by Log-rank test.

Results : The median follow-up interval of 66 patients was 36 months. The univariate analysis of overall survival, disease-free survival and biochemical failure-free survival showed only Gleason score with statistical significance. The 3-year overall survival, disease-free survival and biochemical failure-free survival were 97 % and 55%, 97 % and 27%, and 97 % and 35% in patients with Gleason Score < 8 and Gleason Score \geq 8, respectively ($p < 0.0001$ for each comparison). The 3-year overall survival, disease-free survival and biochemical failure-free survival were 86%, 78%, and 80%, respectively, in patients with stage T2-T4 disease and receiving neoadjuvant hormone therapy followed by definitive RT. Treatment-related acute and late toxicity were all less than or equal to grade 2.

Conclusion : For our patients with adenocarcinoma of prostate undergoing definitive RT and short-term follow-up, we found no statistically significant difference in T stage, nodal status and pretreatment PSA level, except the significance in Gleason score. Our outcome of patients who received RT and neoadjuvant hormone therapy indicated the acceptable quality of care in our department. The larger series with long-term follow-up is needed to further delineate the prognostic factors and confirmed outcome.

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