Patient reported outcomes among treatment modalities for prostate cancer.


Abstract

INTRODUCTION: To characterize patient reported outcomes for urinary and sexual function using International Prostate Symptom Score (IPSS) and Sexual Health Inventory for Men (SHIM) comparing intensity modulated radiation therapy (IMRT), low dose rate brachytherapy (LDR), post-prostatectomy IMRT (PPRT), and radical prostatectomy (RP).

MATERIALS AND METHODS: Patients treated for prostate cancer from 2001-2012 completed self-reported SHIM and IPSS surveys. Subgroups were created by baseline score. Mean change from baseline was determined at each time point for the cohort and subgroups. Statistical analysis was performed with generalized estimating equation method. Incontinence was not captured in the questionnaires.

RESULTS: A total of 14,523 IPSS surveys from 3,515 men were evaluated. Patients treated with IMRT experienced a minimal decrease in IPSS score from baseline. PPRT scores did not differ from IMRT at any time point (range: +/- 3 points from baseline in IPSS score over 50 months). LDR had an initial IPSS rise (between 5-10 points on the IPSS over 1-9 months) versus IMRT but returned to comparable levels at 34 months. RP was associated with a lower IPSS versus IMRT. LDR had the largest rise from baseline, with return toward baseline. A total of 2,624 SHIM surveys from 857 men were evaluated. LDR and PPRT did not differ from IMRT at any time point (range: +/- 5 points from baseline in SHIM score for 36 months). RP experienced the largest decline from baseline (up to -7 points on SHIM score), at 3 to 7 months; RP had a larger early decrease in SHIM score versus IMRT between 3 and 22 months, after which there was no difference.

CONCLUSIONS: IPSS and SHIM score patterns differed among treatment modalities. These data can be used to predict changes in urinary and sexual function over time based on modality and baseline score.