

"Urinary Obstruction Following Brachytherapy Treatment of Prostate Cancer"

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INTRODUCTION:Family history of prostate cancer has been reported to be a poor prognostic factor for prostate cancer treatment. We reviewed men with sporadic or familial cases to determine if family history impacted disease-freedom.

METHODS:From January 1992 through October 1997, 1015 men with clinical stage T1T2 prostate cancer were treated with modern simultaneous irradiation (transperineal I-125 prostate implant followed by external beam radiation). None received hormonal treatment. 973/1015 (96%) had family history recorded; 787 (81%) were sporadic and 186 (19%) had at least one relative (father, brother, uncle) with prostate cancer. All factor distributions are given for sporadic and familial cases, respectively. Median age at diagnosis was 66 vs. 65 years. Median PSA was 7.5 ng/ml vs. 6.8 ng/ml respectively (ns). Distribution by pretreatment PSA 0-10.0 ng/ml vs. 10.1 ng/ml was 74% and 26% versus 73% and 27%, respectively (ns). Distribution by Stage T1 and T2 was 43% and 57% vs. 49% and 51%, respectively (ns). The proportion of Gleason sum 2-6 versus 7-10 was 76% and 24% vs. 78% and 22%, respectively (ns). Disease-freedom is defined by achievement and maintenance of PSA 0.2 ng/ml, the identical definition used in most radical prostatectomy series. Chi-square, Mann-Whitney U-test and log rank tests are used to distinguish significant differences. Median follow-up is 36 months.

RESULTS:In this series, 7-year cancer free results were 89% versus 92% respectively (ns). Overall disease-freedom is 90%. Multivariate analysis demonstrates PSA and Gleason score to be significant predictors of subsequent disease freedom; family history is not.

CONCLUSION:With the exception of age, no difference in pretreatment factors is noted in men with sporadic vs. familial prostate cancer. In addition, no difference in outcome is noted regardless of family history. Results in this series for both groups are comparable to those of reported radical prostatectomy series measured using the same definition of cancer freedom. These findings suggest that men with a family history of prostate cancer do not experience a more virulent form of the disease than sporadic cases.