

## "Pretreatment Erectile Function Of Men Who Underwent Brachytherapy For Prostate Cancer"

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**INTRODUCTION AND OBJECTIVES:** Using a validated, commonly used questionnaire, the quality of erection function is evaluated prior to brachytherapy of prostate cancer.

**METHODS:** From November 1998 to August 2002, 3,304 consecutive T1-T4, NxMo men who did not receive pretreatment hormones, were treated by prostate I-125 seed implant followed by external beam radiation. Pretreatment, all men were given the short form of the International Index of Erectile Function (IIEF-5) and answered questions on diabetes, smoking cigarettes and use of antihypertensive medication. The average age was 63 (35-85).

**RESULTS OBTAINED:** According to age, the pretreatment percent distribution of total IIEF-5 score according to mild to no erectile dysfunction ED (IIEF-5;17-25), moderate to moderately severe ED (IIEF-5; 8-16) and impotent (IIEF-5:7) and average IIEF-5 total score is tabulated below. There is a significant difference in IIEF-5 score according to age ( $p < 0.0001$ ). The average IIEF-5 score for diabetics was 13.4 and non-diabetics was 17.9, a significant difference ( $p < 0.0001$ ), for men on antihypertensive medication the average IIEF-5 score was 15.7 compare with 18.8 for men without medication, a significant difference ( $p < 0.0001$ ) and for men who never smoked or 30 pack-year history (average IIEF-5; 17.9 compared with 14.9 for men with a 30 pack-year history) ( $p < 0.0001$ ). On multivariate analysis using total IIEF-5 score as a continuous variable end-point, age ( $p = 0.0001$ ), diabetes ( $p < 0.0001$ ). On multivariate analysis, using total IIEF-5 scores as a continuous variable end-point, age ( $p \sim 0.0001$ ), diabetes ( $p = 0.0001$ ), antihypertensive medication ( $p = 0.0001$ ) and smoking 31 pack-year ( $p = 0.003$ ) are significantly associated with erectile function but pretreatment PSA, Geason score and stage are not.

**CONCLUSION:** Pretreatment erection function strongly correlates with age, a significant history of cigarette smoking diabetes, and antihypertensive medication.

IIEF-5	50	51-55	58-60	61-65	66-70	71-75	75
17-25	89	87	80	72	60	42	26
8-16	8	9	10	12	18	19	16
7	3	4	10	16	24	38	58
Avg	22	21	20	19	16	13	9