

A prospective study measuring penile length in men treated with radical prostatectomy for prostate cancer.

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PURPOSE: Some patients report that the penis is smaller after radical retropubic prostatectomy for prostate cancer. We performed a prospective study which measured penile length before and after radical retropubic prostatectomy. **MATERIALS AND METHODS:** A total of 124 men consented to penile measurements before radical prostatectomy performed by the same surgeon. Repeat measurements were performed at 3-month intervals following surgery. Penile measurements (cm.) consisted of flaccid length, stretched length, depth of prepubic fat pad and circumference. Statistical analysis of penile measurements was performed using the paired samples and independent Student's t test, Pearson's correlation and analysis of variance. **RESULTS:** Mean patient age was 59.1 (range 42 to 76). No patient had a penile abnormality, for example Peyronie's disease, or history of penile or urethral surgery. The size of the penis was significantly smaller after prostatectomy, and there was a significant difference for flaccid ($p < 0.001$), stretched ($p < 0.001$), prepubic fat pad ($p = 0.02$) and circumference measurements ($p < 0.01$). Twelve patients (19%) had a 15% or greater decrease in stretched penile length. When dichotomizing groups at the cut point of 15% decrease, the independent t test of prostate size was not significant ($t[df\ 36.7] = -1.83, p = 0.076$). Nerve sparing was not significant in relation to change in penile stretched length, ($F[df\ 2, 62] = 0.501, p = 0.609$). **CONCLUSIONS:** Our findings support observations of decreased penile length after radical prostatectomy. Men should be counseled before radical prostatectomy that penile shortening may occur.

