Ejaculation profiles of men following radiation therapy for prostate cancer.

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Abstract

OBJECTIVES: Radical prostatectomy (RP) is associated with anejaculation, which for some men is a source of bother and sexual dissatisfaction. Clinical experience has shown us some men after pelvic radiation therapy (RT) also experience anejaculation. This analysis was conducted to define the ejaculation profiles of men after RT for prostate cancer (PCa).

METHODS: As a routine part of the sexual health evaluation for post-RT patients, men provided information regarding their ejaculatory function and orgasm. Analysis was conducted of a sexual medicine database reviewing demographic data, PCa factors, erectile, ejaculatory, and orgasmic function. Men with prior history of RP, cryotherapy, focal therapies, and androgen deprivation therapy (ADT) were excluded. Patients completed the International Index of Erectile Function (IIEF) questionnaire at follow-up visits commencing with the first posttreatment visit and specific attention was paid to the IIEF orgasm domain.

RESULTS: Three hundred and sixty-four consecutive patients were included. Two hundred and fifty-two patients had external beam, and 112 patients had brachytherapy (BT). Mean age was 64 ± 11 (42-78) years and mean follow-up after RT was 6 ± 4.5 years. Mean prostate size at time of RT was 42 ± 21 g. Of the entire population, 72% lost the ability to ejaculate in an antegrade fashion after prostate RT by their last visit. The proportion experiencing anejaculation at 1, 3, and 5 years after RT was 16%, 69%, and 89%, respectively. For men with at least two IIEF questionnaires completed, the orgasm domain scores decreased dramatically over the follow-up period; orgasm domain scores (0-10): <12 months post-RT 7.4, 13-24 months 5.4, 25-36 months 3.2, >36 months 2.8 (P < 0.01). Multivariable analysis identified several factors predictive of failure to ejaculate: older age, ADT, RT dose > 100 Gy, and smaller prostates at the time of RT.

CONCLUSIONS: The vast majority of men after prostate RT will experience anejaculation and should be counseled accordingly prior to undergoing therapy. We have identified predictive factors.

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