

### PD28-03 EFFECTS OF FUNCTIONAL ELECTROSTIMULATION ON ERECTILE FUNCTION RECOVERY FOLLOWING BILATERAL NERVE-SPARING RADICAL PROSTATECTOMY: A RANDOMIZED SHAM-CONTROLLED STUDY

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**INTRODUCTION AND OBJECTIVES:** To evaluate the effect of functional electrostimulation (FES) as a penile rehabilitation procedure on the erectile function (EF) of patients following nerve sparing radical prostatectomy (NSRP).

**METHODS:** This was a prospective, blind, randomized, sham-controlled trial. The study included men  $\leq 70$  yr undergoing radical prostatectomy with bilateral preservation of the neurovascular bundle, with previous unassisted normal EF (International Index of Erectile Function, Erectile Function domain [IIEF-EF] score  $\geq 26$ ); total PSA  $< 10$  ng/mL and Gleason score  $\leq 7$ . Patients were randomly assigned, in a 1:1 ratio, to undergo FES or sham procedure. Penile rehabilitation was performed for 6 months, twice a week, during 30 minutes. Patients were evaluated at 1, 3, 6, 9 and 12 months after the start of the procedures. The primary endpoint was proportion of patients with IIEF-EF score  $\geq 22$  after 12 months of the start of treatment. Secondary endpoints included rate of positive responses to Sexual Encounter Profile (SEP) questions 2 and 3 and to Global Assessment Question (GAQ) questions 1 and 2.

**RESULTS:** Twenty and three patients were randomized to FES and 26 to sham. After 12 months of the start of the study procedures 52.2% and 19.2% of patients reached IIEF-EF score  $\geq 22$  in FES and sham groups, respectively ( $p = 0.016$ ). This effect was also observed in other endpoints (table 1). A significantly higher proportion of patients in FES group compared to sham group had positive responses to SEP2 and GAQ1 from the 6th month to the end of the study. There was numerical, but no statistical, difference in the rate of SEP3 and GAQ2 positive responses between the groups. No adverse events related to FES were reported by patients.

**CONCLUSIONS:** Functional electrostimulation was efficacious and safe as a penile rehabilitation procedure in improving recovery of unassisted EF in patients undergoing NSRP. The effect of FES was maintained after cessation of active therapy.

**Table 1 – Proportion of patients with IIEF-EF  $\geq 22$  according to treatment group**

Month	Treatment		P
	FES (n=23)	SHAM (n=26)	
1	16.7%	11.8%	1.000
3	26.1%	4.0%	0.044
6	45.5%	15.4%	0.022
9	47.8%	19.2%	0.033
12	52.2%	19.2%	0.016

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### PD28-04 CAN A TWO-HOUR FAST BEFORE AND AFTER CONSUMING A SILDENAFIL 100 MG TABLET STATISTICALLY IMPROVE ERECTILE FUNCTION AND PATIENT SATISFACTION IN NORMAL MEN WHO OTHERWISE HAVE FAILED TO ACHIEVE FULL ERECTION WITH PRIOR SILDENAFIL USE?

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**INTRODUCTION AND OBJECTIVES:** Can a two-hour fast from all food or drink before and after consuming a Sildenafil 100 mg tablet improve erectile penetration and patient satisfaction in those you have otherwise been unsuccessful with Sildenafil?

**METHODS:** Between February 2014-February 2018, we performed an observational, retrospective evaluation of 168 men who experienced unsuccessful penile erections after consuming Sildenafil 100 mg tablets on multiple occasions with attempted sexual activity (with a partner or with masturbation) and who had a normal physical examination, were non-diabetic, with a normal free and total testosterone, and were fully ambulatory. They were given instructions to consume a Sildenafil 100 mg tablet were two hours before and after it being orally administered, they were to abstain from all food or drink. The Sildenafil 100 mg tablet was for the most part consumed at or about 4 pm on the day of expected sexual activity. All patients were given a prescription for 6 monthly tablets with one refill and were asked to return for our reassessment in 60 days with a completed written diary for these 12 sexual experiences. Both an International Index of Erectile function -5 score [IIEF-5. Score 1-25], Erectile Hardness Score [EHS 0-4] and Patient Global Impression of Improvement [PGII, score 1 excellent and 5-worse outcome] were recorded before and after their trial. Success was defined as having achieved these three milestones; 1. a IIEF score  $>21$ , 2. a EHS score  $>3$ , and 3. a PGII score of  $<2$ . All results underwent standard statistical analysis with Pearson coefficient determination for relevance of improvement.

**RESULTS:** One hundred and nineteen of 168 male patients [71 percent] were successful in attaining a IIEF score of  $>21$ , an EHS score  $>3$  and a PGII score of 2 or less. IIEF scores improved from  $11.3 \pm 4.1$  to  $22.5 \pm 5.1$  [ $P < 0.01$ ], EHS from  $1.5 \pm 0.8$  to  $3.5 \pm 0.6$  [ $p < 0.01$ ] and PGII scores improved from  $4.1 \pm 2.2$  to  $1.5 \pm 0.8$ . [ $p < 0.01$ ]. There were only 7 discontinuations [7/168, 4.1 percent] for either facial flushing or nasal congestion.

**CONCLUSIONS:** A simple regimen of consuming a Sildenafil 100 mg tablet with a 2-hour fast from all food and drink before and after its consumption leads to a successful and satisfactory erectile functional improvement in 71 percent of normal male patients who prior to this regimen were unsuccessful in achieving erection with sexual activity. We recommend randomized studies in both normal and diabetic men to ascertain the usefulness of this simple regimen.

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### PD28-05 THE IMPACT OF SMOKING ON SEXUAL FUNCTION PARAMETERS

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**INTRODUCTION AND OBJECTIVES:** There is a well-established relationship between smoking and sexual dysfunction. However, the impact of smoking cessation remains unclear. We used the large data from Reduction by Dutasteride in Prostate Cancer Events (REDUCE) study to assess the association between current, former, and never smoking with sexual function.

**METHODS:** We analyzed baseline data of 6,754 men, ages 50-75 year-old enrolled in the REDUCE study. Subjects were divided into: lifetime nonsmokers, former smokers and current smokers. Sexual function variables analyzed were: total testosterone level (nmol/L), and current sexual activity, self-reported low libido and erectile dysfunction (all yes or no). Differences in sexual function variables were assessed with chi-square test, analysis of variance and linear and logistic regressions.

**RESULTS:** A total of 3,069 (45.4%) men were nonsmokers, 2,673 (39.6%) former, and 1,012 (15%) current smokers. Current smokers were significantly younger than former and nonsmokers (mean age 61.6, 63.2, 62.7 years, respectively), leaner (mean body-mass index 27.0, 27.7, 27.2 kg/m<sup>2</sup>, respectively), and had lesser prevalence of hypertension (32.4%, 41.6%, 36.8%, respectively, all  $P < 0.01$ ). In univariate analysis, despite current smokers having the highest mean total testosterone levels compared to former and nonsmokers (485.4, 440.6, 451.2 nmol/L, respectively,  $P < 0.001$ ), they had the highest prevalence of low libido (25.6%, 23.2%, 21.0%,