## Title

1376 THE ASSOCIATION OF POSTTRAUMATIC STRESS DISORDER WITH SEXUAL DYSFUNCTION IN MALE IRAQ AND AFGHANISTAN VETERANS



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spermatogonia. Combined with our previous results, it can be seen that the EEF1A1 gene is highly expressed until 6 years of age and is subsequently equally expressed in cryptorchid testes and descended testes. In contrast, expression of the TPT1 gene was lower in cryptorchid testes than descended testes after 6 years of age. The TPT1 gene was expressed in spermatogonia and was associated with an undifferentiated state of these cells, suggesting that spermatogonia could not maintain stemness in cryptorchid testes.

| | Early orchiopexy (52 cases, 62 testes) | Late orchiopexy (36 cases, 47 testes) |
|---|---|---|
| Age at operation (months) | 9.7 ± 2.1 (5-12) | 101.1 ± 25.5 (72-167) |
| Laterality (cases) | | |
| Bilateral | 10 | 11 |
| Unilateral | 42 | 25 |
| Testicular location at operation | | |
| Intra-abdominal | 15 | 5 |
| Intra-canal | 41 | 28 |
| Retractile | 6 | 14 |
| Interstitial fibrosis (cases) | 9 (14.5%) | 16 (34.0%)* |
| Number of spermatogonia | 6.8 ± 2.4 | 2.9 ± 0.6† |
| Gene expression value | | |
| EEF1A1 gene | 1.23± 0.33 | 1.07± 0.30 |
| TPT1 gene | 1.25± 0.50 | 0.75± 0.37† |

(* $p < 0.05$, † $p < 0.005$)

**Source of Funding:** None

## Sexual Function/Dysfunction/Andrology: Evaluation II

## Podium

**Monday, May 21, 2012** **3:30 PM-5:30 PM**

### 1376
### THE ASSOCIATION OF POSTTRAUMATIC STRESS DISORDER WITH SEXUAL DYSFUNCTION IN MALE IRAQ AND AFGHANISTAN VETERANS

*Benjamin Breyer*, Beth Cohen, Daniel Berterthal, San Francisco, CA; Raymond Rosen, Watertown, MA; Thomas Neylan, Karen Seal, San Francisco, CA*

INTRODUCTION AND OBJECTIVES: The main aim of this study was to examine the association between posttraumatic stress disorder (PTSD) and sexual dysfunction in male Iraq and Afghanistan veterans.

METHODS: This retrospective study used a Department of Veteran Affairs (VA) administrative database of Iraq and Afghanistan veterans enrolled in VA healthcare following military service separation between 10/07/01 through 09/30/11. ICD-9 diagnostic codes were used to identify PTSD and sexual dysfunction diagnoses, including erectile dysfunction (ED) and premature ejaculation (PE). Health services utilization and prescription medication data were also obtained. Descriptive statistics were used to compare the prevalence of sexual dysfunction in veterans with and without PTSD and generalized linear models were used to examine associations between PTSD and sexual dysfunction, utilization of urology services, and the prescription of medication for sexual dysfunction.

RESULTS: The median age of 643,599 Iraq and Afghanistan veterans in VA healthcare was 26 years; the prevalence of PTSD during the study period was 28.5%. The overall prevalence of sexual dysfunction, ED and PE were 5.2%, 2.7%, 0.1%, respectively. Male veterans with PTSD compared to those without PTSD were more likely to suffer from any sexual dysfunction (9.8% versus 3.3%, p=0.001), ED (5.2% versus 1.8%, p<.001) and PE (0.2% versus 0.1%, p <.001). Veterans with PTSD compared to those without PTSD were also more likely to receive a prescription for a phosphodiesterse inhibitor for ED (12.6% versus 3.4%, p<.001) and attend a urology clinic visit (8.1% versus 3.6%, p<.001). In a generalized linear model adjusted for sociodemographic, military service characteristics, and spinal cord injury, PTSD independently increased the risk of sexual dysfunction [adjusted risk ratio(ARR)=3.30, 95% Confidence Interval (CI) = 3.23-3.37]. After additional adjustment for medications used to treated PTSD (e.g. selective serotonin uptake inhibitors and other psychoactive medications), the risk decreased, but remained significant (ARR=1.60, 95% CI= 1.55-1.65).

CONCLUSIONS: Sexual dysfunction is prevalent among Iraq and Afghanistan veterans who have received PTSD diagnoses. While medications used to treat PTSD contribute to sexual dysfunction, PTSD or the symptoms of PTSD (e.g. avoidance, emotional numbing, and hyperarousal) also appear to independently impact sexual function. Awareness of the strong association between PTSD and sexual dysfunction may lead to more research and better treatment of this important quality of life issue.

**Source of Funding:** BNB was supported by NIH grant K12DK083021

### 1377
### PAIN ASSOCIATED WITH INTRACAVERNOSAL INJECTION THERAPY AFTER RADICAL PROSTATECTOMY: CLINICAL IMPLICATIONS

*Raanan Tal*, Joseph B. Narus, Andrea Martelli, Patricia Guhring, Marilyn Parker, John P. Mulhall, New York, NY*

INTRODUCTION AND OBJECTIVES: Prostaglandin E1 (PGE1)-associated pain in men using intracaverosal injections (ICI) after radical prostatectomy (RP) is a well-recognized entity. This is believed to be due to PGE1- mediated hypersensitivity in men with cavernous nerve trauma. This entity has been minimally explored and little data exists on the clinical implications of this, in particular it relates to erectile function recovery (EFR). This analysis was performed in an effort to define the prevalence of this condition and its association with EFR post-RP.

METHODS: Men after RP requiring ICI who developed penile pain with trimix during in-office training or within the first 6 months after commencing at-home use constituted the study population. A standard pain visual analog scale (0-10) was used to assess pain. Nerve sparing status (NSS) was defined by the surgeon at the end of the operation and was categorized as bilateral (BNS), unilateral (UNS) and non-nerve sparing (NNS). Success with PDE5 inhibitors (PDE5i) was assessed at 24 months (m) post-RP as was defined as the ability to have vaginal penetration. ANOVA was used when comparing pain incidence and degree between NSS groups. Logistic and linear regression were used for multivariable analysis (MVA) to define predictors of failure to respond to PDE5i at 24m post-RP.

RESULTS: 732 patients using ICI after RP were analyzed. Mean age = 56±14 (42-72) years (y). Duration post-RP at ICI training = 4±2m. NSS: BNS 74%, UNS 11%, NNS 15%. Incidence of pain with ICI based on NSS: BNS 11% of patients, UNS 34%, NNS 90% (p<0.001). Median VAS in those experiencing pain: BNS 2 (IQR 1,5), UNS 4 (IQR 2,6), NNS 6 (3,9) (p<0.001). PDE5i success at 24m (pain-vs pain+): BNS 67% vs 41% (p<0.01), UNS 51% vs 24% (p<0.001), NNS 11% vs 0% (p<0.001). On MVA, predictors of failure to respond to PDE5i at 24m post-RP included increasing age, non-nerve sparing surgery, baseline ED, presence of pain, pain VAS (see table).

CONCLUSIONS: Penile pain with ICI is related to nerve sparing status with the vast majority of NNS patients experiencing it. Furthermore, magnitude of pain is also related to degree of nerve sparing. Pain presence and its severity are predictive of PDE5i failure at 24m after RP.