

Source of Funding: None

GG02-16

INTRA-PLAQUE PLATELET-RICH PLASMA (PRP) INJECTIONS FOR STABLE PHASE PEYRONIE'S DISEASE: A TWO-CENTER REAL-LIFE PROSPECTIVE PILOT STUDY

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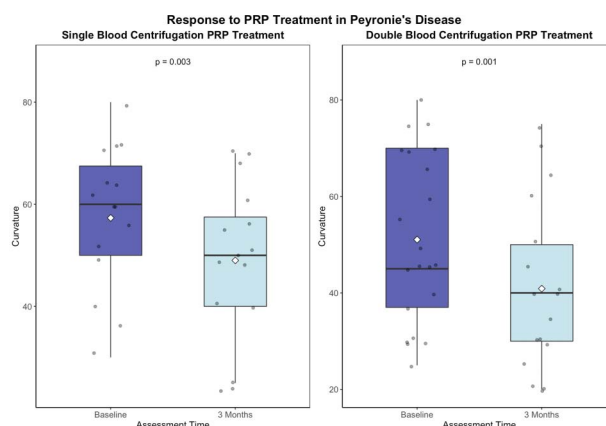
INTRODUCTION AND OBJECTIVE: Platelet-Rich Plasma (PRP) into penile plaques has emerged as promising approach for treating stable-phase Peyronie's Disease (PD), although it is still investigational. We aimed to analyze preliminary results of 2-center real-life prospective pilot study.

METHODS: Data from 38 patients undergoing at least two PRP injections were prospectively collected. All patients underwent dynamic penile Color Doppler-duplex ultrasound (CDDU) at baseline to assess penile hemodynamic parameters and measure penile curvature. All men completed International Index of Erectile Function (IIEF-EF) and Peyronie's Disease Questionnaire (PDQ) at baseline and follow-up (FU). According to the center, PRP was obtained using double or single blood centrifugation. All patients received two injections, each consisting of an average of 4-4 mL of PRP, administered 4-week apart. All patients had 3-mo FU assessment, including CDDU, IIEF-EF and PDQ. Descriptive statistics were used to detail population characteristics and changes in curvature, IIEF-EF and PDQ.

RESULTS: Median (IQR) age was 60 yrs (54-67). 22 (57.9%) received PRP injection after 2 centrifuge cycles and 16 (42.1%) after 1. 2-cycle group showed a median penile curvature of 45° (37-70) at baseline which decreased to 40° (30-50) at 3-mo FU ($p=0.001$). The 1-cycle group had a baseline median curvature of 60° (50-67.5) which decreased to 50° (40-57.5) ($p=0.003$), Figure 1. Overall, median (IQR) penile curvature was 55° (45-70) at baseline and significantly decreased to 45° (30-55) after PRP treatments, with a median reduction of 10° ($p=0.02$). Median (IQR) IIEF-EF and PDQ scores were 21.5 (12.3-26.8) and 22 (18-34) at baseline, respectively, and 23.0 (13.8-26) and 18 (14.5-22) at 3-mo FU, both showing no significant difference from baseline. The median (IQR) peak systolic velocity showed non-significant increase from 38.8 cm/s (35.2-53.8) to 46.9 cm/s (37.9-64.5) at 3-mo FU ($p=0.11$). Median plaque diameter decreased from 14 to 9.6 mm post-treatment. No adverse effects were reported.

CONCLUSIONS: Preliminary findings would indicate that PRP injections are a safe therapeutic option. We observed a median 10° improvement in penile curvature, with both one and two centrifuge

cycles showing significant curvature reduction. The observed decrease in penile curvature is still inadequate to extrapolate clinically significant long-term outcomes.



Source of Funding: None

GG02-17

TIMING OF MOOD IMPROVEMENT POST TESTOSTERONE THERAPY INITIATION

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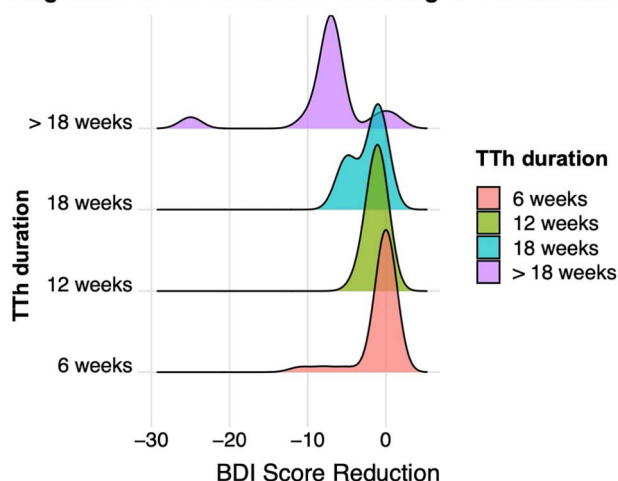
INTRODUCTION AND OBJECTIVE: Testosterone therapy (TTh) is commonly prescribed for male hypogonadism, the timing and extent of its effects on mood parameters remain unclear in real-life clinical practice. While some studies suggest that TTh can improve depressive symptoms, the variability in response over time has not been thoroughly investigated. We aimed to assess the impact of TTh in terms of mood deflection improvement at various intervals post-treatment initiation, as measured by the Beck Depression Inventory (BDI).

METHODS: Retrospective data from the last 58 patients undergoing TTh at a single center were analyzed, with a focus on BDI scores before and after treatment initiation. Baseline clinical characteristics, including total testosterone (tT) levels and health comorbidities as scored with the Charlson comorbidity index (CCI), were recorded. Patients were grouped into: Group 1, those who showed improvement in their BDI scores post-TTh initiation; and, Group 2, those who did not report BDI scores improvements. Descriptive statistics were used to compare the two groups. Univariable (UVA) linear regression models were employed to explore the association between TTh duration and BDI scores changes. Ridge regression curves was used to graphically display the distribution in BDI score reduction according to the duration of TTh (e.g., 6 weeks, 12 weeks, 18 weeks and >18 weeks).

RESULTS: 29 patients (50%) reported variable improvement in BDI scores after starting TTh. No difference in terms of age (median (IQR) 56 (50-63) vs. 61 years (53-67); $p=0.57$) and BMI (5.9 (24.6-28.1) vs. 26.8 kg/m² (24.6-29.4); $p=0.34$) was found in the 2 groups. Baseline BDI scores were 11 (7-18) in group 1 and 7 (3-12) in group 2 ($p=0.08$). BDI >16 were present in 7 (24.14%) men and in 4 (13.79%) men, respectively. Most patients reporting BDI scores improvement received TTh for >18 weeks (14 patients, 48.28%), 3 (10.34%) were treated for 18 weeks, 9 (31.03%) for 12 weeks, and 3 (10.34%) for 6 weeks, respectively. Conversely, all group 2 patients were assessed at the 6-week mark. Linear regression analysis showed that the longer TTh duration the greater the BDI improvement (coefficient -0.002, $p=0.0001$), after adjusting for age, BMI, and baseline tT levels.

CONCLUSIONS: Our findings suggest that mood improvements following TTh initiation may occur progressively, with the most substantial reductions in depressive symptoms observed after 18 weeks post-TTh initiation.

Magnitude of BDI reduction according to TTh duration



Source of Funding: None

GG02-18

DETECTION RATE OF 18F/68GA-PSMA PET/CT ACCORDING TO HISTOLOGICAL VARIANTS, CYTOARCHITECTURAL PATTERN AND HISTOTYPES IN PROSTATE CANCER PATIENTS WITH BIOCHEMICAL RECURRENCE AFTER RADICAL PROSTATECTOMY

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INTRODUCTION AND OBJECTIVE: Current guidelines recommend the use of PSMA PET/CT in prostate cancer (PCa) patients experiencing biochemical recurrence (BCR) after radical prostatectomy (RP). Although histological variants (HVs) at RP might be associated with worse oncological outcomes, no data exist regarding the diagnostic accuracy of PSMA PET/CT for PCa with one or more HVs. We assessed the PSMA PET/CT detection rates in PCa patients experiencing BCR according to HVs at RP.

METHODS: Overall, 244 patients treated with RP±extended pelvic lymph node dissection (ePLND) at a single referral center between 2017 and 2022 who experienced BCR during follow-up (defined as two PSA values ≥ 0.2 ng/ml) were identified. All pathologic specimens were reviewed by two high-volume dedicated uro-pathologists. All patients were re-staged with 18-F/68Ga-PSMA PET/CT at a single center. The following HVs were considered: cribriform pattern, ductal histotype and mucinous variant. Uni- and multivariable logistic regression models (UVA/MVA) tested the impact of the presence of HVs and different HVs subtypes on the probability of positive nodal or metastatic spots at PSMA PET/CT, after adjusting for PSA, pT stage, pN stage, and positive margins.

RESULTS: Out of the 244 patients restaged with PSMA PET at the time of BCR, 37 (16%) had HVs at final pathology. There were no differences between men with and without HVs in age (64 vs. 65 years) and PSA (8 vs. 8 ng/ml, all $p=0.8$). For patients with pure acinar PCa (aPCa) and aPCa with HVs, ISUP ≥ 4 was diagnosed in 87 (42%) and

22 (60%; $p=0.02$), stage $\geq pT3b$ was detected in 72 (35%) and 17 (46%; $p=0.2$) while 67 (32%) and 12 (32.5%) had a pN1 disease, respectively ($p=0.9$). A total of 17 (46%), 17 (46%) and 3 (8%) patients with HVs had a cribriform, ductal and mucinous variant. Overall, PSMA PET positivity rate was 50% (103/207) vs. 41% (7/17) vs. 76% (13/17) vs. 33% (1/3) for pure acinar, cribriform, ductal and mucinous variant ($p=0.1$). No differences were observed between PSA levels at BCR according different HVs subtypes ($p=0.5$). At UVA, presence of ductal histotype (OR 3.40, $p=0.04$) was associated with higher odds of PSMA PET/CT positivity. No significant association with PSMA PET positivity were found for other HVs. MVA analysis confirmed the correlation between PSMA PET/CT positivity and ductal histotype detection at RP (OR 3.52, 95% CI 1.15-13.2, $p=0.04$).

CONCLUSIONS: PSMA-PET performance characteristics in the restaging setting in patients experiencing BCR after RP may be influenced by HVs at final pathology. PSMA-PET have higher detection rates in patients with ductal histotype. These men are at higher risk of positive spots at PSMA-PET and should be considered for this imaging at the first sign of recurrence.

Source of Funding: None

GG02-19

CAN WE RELY SOLELY ON THE INTERNATIONAL INDEX OF ERECTILE FUNCTION TO ASSESS SEXUAL HEALTH? A REAL-LIFE CROSS-SECTIONAL ANALYSIS

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INTRODUCTION AND OBJECTIVE: Principal Component Analysis (PCA) is a tool for comparing psychometric tools. We aimed to evaluate the overlap and unique contributions of International Index of Erectile Function (IIEF) and Male Sexual Health Questionnaire (MSHQ) in assessing different domains of male sexual health, using PCA.

METHODS: Data from 209 white-European heterosexual men assessed for sexual dysfunction were analyzed. All men completed IIEF questionnaire and MSHQ at first evaluation. A PCA was applied on combined domain scores from MSHQ and IIEF. Nine domains (IIEF-Erectile Function; Orgasmic Function; Intercourse Satisfaction; Overall Satisfaction; Sexual Activity and MSHQ-Erectile Function; Ejaculatory Function; Sexual Activity; Sexual Desire) from both tools were included, capturing a range of physical function and relational satisfaction aspects. Components explaining at least 80% of the cumulative variance were examined to assess whether both questionnaires provided unique insights or redundant measures.

RESULTS: PCA identified key patterns in MSHQ and IIEF domains, capturing almost 80% of the total variance within the first four components. The first principal component (PC1) explained 43% of the variance, representing a general sexual health factor with substantial contributions from both questionnaires. PC1 showed high positive loadings for IIEF-IS (0.43), IIEF-OS (0.42), and IIEF-EF (0.41), along with moderate contributions from MSHQ domains such as MSHQ-SD (0.35). Since both questionnaires contribute to PC1, this suggests that neither questionnaire alone fully captures this dimension. The second component (PC2), accounting for 15% of the variance, distinguished specific physical and satisfaction aspects, with notable positive loadings from IIEF-OF (0.39) and MSHQ-EjF (0.29), and a strong negative loading for IIEF-SD (-0.58). The third component (PC3), explaining 13% of the variance, captured relational and emotional satisfaction uniquely from the MSHQ domains, with high positive loadings from MSHQ-EjF (0.54) and MSHQ-SA (0.31), and a negative loading from MSHQ-SD (-0.38). The fourth component (PC4) accounted for 8% of the variance, further differentiating relational satisfaction and physical function, with a notable negative loading from MSHQ-EF (-0.78) and positive loading for IIEF-OF (0.45).

CONCLUSIONS: MSHQ and IIEF share a common underlying factor in assessing overall sexual health, suggesting partial