Original Research

Vaginal Injection of Platelet-Rich Plasma for Sexual Function

A Randomized Controlled Trial

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OBJECTIVE: To assess changes in sexual function in women randomized to anterior vaginal wall injection with platelet-rich plasma (PRP) or saline placebo.

METHODS: This pilot single-center, single-blind, randomized controlled trial enrolled sexually active premenopausal women 18–50 years of age without severe sexual dysfunction. Participants were randomized to either PRP or control (saline) one-time injection into the distal anterior vaginal wall and followed up for 6 months. The primary outcome was change in FSFI (Female Sexual Function Index) score at 6 weeks.

RESULTS: Fifty-two participants were randomized, 26 (50.0%) to PRP and 26 (50.0%) to control. In women treated with PRP, the median total FSFI score showed a greater increase at 6 weeks and 6 months after injection compared with women in a control group (6-week score change for total FSFI score: PRP 2.2 [95% CI, 0.6–4.8], control 0.3 [95% CI, −1.7 to 2.3]; 6-month change: PRP 1.6 [95% CI, −0.2 to 4.1], control 0.8 [95% CI, −1.1 to 2.7], *P*=.05). Women treated with PRP demonstrated improved FSFI subscale scores for desire (6-week change score 0.6 [95% CI, 0.1–1.1]), arousal (0.8 [95% CI, 0.2–1.2]), lubrication (0.7 [95% CI, 0.2–1.2]), and orgasm (1.0 [95% CI, 0.1–1.5]), although these changes were not statistically significantly different compared with control. The percentage of participants reporting improved sexual function based on the PGI-I (Patient Global Impression of Improvement) score was higher in the PRP group at 6 weeks (69.2% PRP vs 42.3% control, *P*=.05) and at 6 months (69.2% PRP vs 34.6% control, *P*=.01). No serious adverse events were reported.

CONCLUSION: This randomized controlled trial provides compelling data demonstrating greater improvement in sexual function with anterior wall PRP injections compared with control in sexually active premenopausal women without severe sexual dysfunction.

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Platelet-rich plasma (PRP) is autologous blood product that has been centrifuged to a solution with a high concentration of platelets.[1] It was first used in the 1970s in orthopedics, dermatology, and plastic surgery.[2–5] Platelet-rich plasma is thought to act through platelet degranulation and release of growth factors stimulating connective tissue synthesis, cellular proliferation, and tissue regeneration and revascularization.[6,7] Platelet-rich plasma is completely autologous, with few contraindications and minimal adverse events. A recent meta-analysis reported less than 1% risk of minor adverse events and no serious adverse events.[8]

Female sexual interest, arousal, and desire involve a complex interplay of neurotransmitters, hormones, and emotional factors. Despite limited

U.S. Food and Drug Administration–approved treatments for female sexual dysfunction, a recent survey found substantial interest in medication and therapies to improve desire and orgasm.[9] Platelet-rich plasma is one potential therapy for enhancement of female sexual function.[10]

The anterior vaginal wall is considered an erogenous zone because of the potential for aggregation of neurovascular structures that contribute to sexual arousal and thus is a popular location for PRP injections, where regenerative effects such as neovascularization and collagen formation are hypothesized.[11–13] Evidence supporting PRP for female sexual function is limited to small, single-arm studies with short follow-up, most involving postmenopausal women and lacking control groups, although many reported improvements in FSFI (Female Sexual Function Index) scores.[14–17]

Given the paucity of high-quality comparative data, we aimed to conduct a randomized, placebo-controlled trial assessing the efficacy and safety of PRP injections in premenopausal, sexually active women without severe female sexual dysfunction.

METHODS

This single-blind, randomized placebo-controlled comparative-effectiveness trial was performed in the outpatient setting at a urogynecology clinic within a tertiary health care system. Participants were recruited from June 2023 to September 2024. The study protocol was approved by MedStar Health Research Institute IRB (STUDY00005761) and registered at ClinicalTrials.gov (NCT05769283 on February 15, 2023). All participants consented to participation before enrolling in the trial.

Participants were considered eligible if they were premenopausal, natal females, between 18 and 50 years of age, English speaking, and sexually active with at least one episode of sexual activity per week. *Sexual activity* was defined as partnered or solo penetrative or nonpenetrative stimulation of the clitoris or vagina. Exclusion criteria included pregnancy, *pelvic organ prolapse* (defined as symptomatic prolapse protruding beyond the hymen), history of pelvic organ prolapse surgery, prior vaginal mesh placement or midurethral mesh sling surgery, pelvic radiation, chronic pelvic pain inhibiting a pelvic examination, female genital mutilation, genital tract malignancy, a prior diagnosis of moderate-to-severe female sexual dysfunction, or an FSFI score below 14.4 at baseline.

All potential participants underwent a screening visit either virtually or in person and were provided with a PowerPoint presentation describing the purpose of the study and potential risks and benefits. After providing verbal consent, participants completed a baseline questionnaire (including self-identified demographic variables to help characterize the study population), the FSFI, and a 1-week retrospective sexual encounter diary. If deemed eligible for participation based on the above criteria, they were scheduled for their injection procedure. At the procedural visit, they signed a written informed consent and were then randomized to active (a PRP injection) or control (a saline injection).

Participants were followed up for 6 months. At 6 weeks and 6 months, participants were asked to repeat the FSFI, a 1-week retrospective sexual encounter diary, the PGI-I (Patient Global Impression of Improvement), and an adverse event assessment. Participants were instructed to report any adverse events if they occurred at any point during the 6-month follow-up period.

To minimize variation, two gynecologists on the study team were responsible for preparation and completion of the injections. On the day of the injection, a trained phlebotomist collected the participant's blood by standardized blood draw. Women in both arms underwent a venipuncture with a 19-gauge needle to collect 40–60 mL of blood in a syringe with 8 mL of anticoagulant. The preparation of PRP and placebo injection was conducted in a separate room while the participant waited in the examination room. The Angel PRP system was used for PRP preparation.[18] The blood sample was centrifuged for 15–20 minutes in an automated process, and the PRP was automatically dispensed into a syringe. Approximately 2–4 mL of PRP was produced with one spin cycle.

Participants were placed in lithotomy position with legs draped. To maintain blinding, the syringe was covered so that participants could not see its contents. A half-speculum was placed in the vagina to expose the anterior vaginal wall, which was then cleaned with a povidone–iodine swab stick. A 22-gauge needle was used to perform three injections into the anterior vaginal wall, 3 cm from the urethral meatus at the midline and 1–2 cm on the right and left of midline (Fig. 1). Unless they were unable to tolerate the planned amount, participants in the PRP arm received the full volume of PRP obtained, and the control arm received 4 mL of 0.9% injectable sodium chloride solution. If the participant did not tolerate the full amount, a smaller volume was injected, and the volumes were recorded. Immediately after the injections, the participants rated the pain of the injection procedure on a 10-cm visual analog scale (VAS).

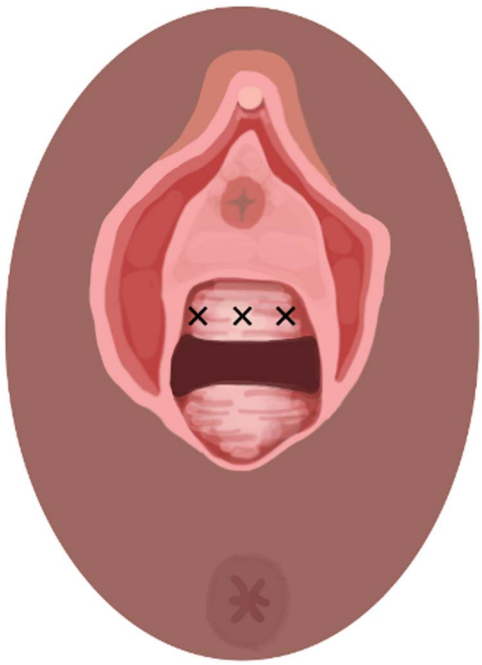

Fig. 1. Anterior vaginal wall injection site locations (identified with x).
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The primary outcome was the change in the total FSFI score from baseline to 6 weeks after the injection procedure. The FSFI is a 19-question validated questionnaire for assessment of sexual function, with lower scores indicating more dysfunction. Scores below 26.55 (of a maximum possible score of 36) indicate sexual dysfunction. Secondary outcomes included change in FSFI score between baseline and 6 months, change in FSFI subdomain scores from baseline to 6 weeks and 6 months, PGI-I score at 6 weeks and 6 months, VAS pain score, number of weekly sexual encounters, and rate of adverse events. One week after the injection, all participants were assessed for adverse events, including any ongoing vaginal bleeding, urinary tract infection symptoms, or abnormal discharge. If they were experiencing any of these, they were offered an in-person visit for evaluation.

Study data were collected and managed with REDCap (Research Electronic Data Capture) electronic data capture tools. A secure, web-based software platform, REDCap is designed to support data capture for research studies, providing 1) an intuitive interface for validated data capture, 2) audit trails for tracking data manipulation and export procedures, 3) automated export procedures for seamless data downloads to common statistical packages, and 4) procedures for data integration and interoperability with external sources.[19,20]

Randomization was performed 1:1 in alternating permutated blocks of four and six with allocation concealment through REDCap. The randomization scheme was generated by an independent biostatistician. All participants were blinded to treatment for the duration of their participation in the study.

We calculated the sample size required to achieve 80% power to detect a clinically meaningful difference of 4.2 points (the minimal important difference) in total FSFI score between the PRP and saline groups at 6 months. The SD was assumed to be 4.9 from the average of the three largest SDs reported in prior studies.[13,21,22]

Power calculations were based on the Mann–Whitney *U* test. To account for potential nonnormality of FSFI scores, outcome data were generated in PASS 2024 with a gamma distribution with the specified mean and SD, and power was estimated through simulation by applying the Mann–Whitney *U* test to the simulated datasets.[23]

Under these assumptions, a total sample size of 46 participants (23 per group) was required. Allowing for up to 10% loss to follow-up, we targeted enrollment of 52 participants (26 per group). We note that this calculation is conservative; the primary analysis uses a proportional odds model with repeated measures rather than a single cross-sectional comparison.

We applied an intention-to-treat analysis. Baseline characteristics of participants were summarized with frequencies and percentages. The Fisher exact test was used to compare categorical characteristics, and the Mann–Whitney *U* test was used to compare ordinal characteristics between the two arms. We used proportional odds models to compare changes in outcome distributions over time between the two arms. The model included the fixed effects of arm (PRP vs control), time point (0, 6, and 24 weeks), the interaction of arm and time point, weeks beyond 6 weeks (0 and 18 weeks), and the interaction of arm and weeks beyond 6 weeks. The model also included a random intercept for participant to account for multiple measurements for each participant. The model was fit with the use of clmm() in the ordinal package in R 4.3.3.[24] We used the resulting proportional odds model to estimate the median or other quantiles as appropriate to summarize differences. The CIs for medians and differences in medians were obtained with the parametric bootstrap. We also analyzed whether the total FSFI score was less than 26 (a score indicating sexual dysfunction) as a binary outcome using a generalized linear mixed model similar to the proportional odds

model. The number of sexual encounters for each participant was evaluated with a Poisson regression model similar to the other models. The main test for all models was the treatment arm–by–time interaction, which evaluates whether the trajectory of FSFI scores over follow-up differs between the arms. This effect was tested with the likelihood ratio test comparing the model with and without the interactions. Because the primary outcome was total FSFI score, we did not adjust the *P* value for the main test for this outcome. However, we used the Holm procedure to adjust for multiple testing for the remaining outcomes. The Holm procedure is a step-down method for multiple testing that controls the familywise type 1 error rate. It is generally more powerful than the Bonferroni correction and is appropriate when outcomes are likely to be correlated, as is the case with FSFI subscales.

RESULTS

Overall, 71 women were screened for eligibility, and 52 were enrolled; 26 (50.0%) were randomized to PRP, and 26 (50.0%) were randomized to control. All 52 patients completed their 6-week and 6-month follow-up and were included in final analyses (Fig. 2).

Baseline characteristics were similar between treatment arms (Table 1). Most participants were heterosexual, cis-identifying women. Most participated in vaginal receptive intercourse and oral and manual stimulation. All injections used between 2 and 4 mL of injectate with no significant difference in amount injected between treatment arms ($P=.5$). Only two participants received 2 mL of injectate, and both were in the PRP arm. There was no difference in FSFI score based on volume differences.

Table 2 shows the FSFI total and subscale scores across time points by treatment arm. At baseline, the median total FSFI score was similar, with a median score 25.2 (95% CI, 22.6–26.9) in the PRP arm and 25.6 (95% CI, 23.3–27.4) in the control arm. The primary outcome of total FSFI score showed a significantly greater improvement in the PRP arm at 6 weeks (PRP 2.2 [95% CI, 0.6–4.8], control 0.3 [95% CI, −1.7 to 2.3]) and at 6 months (PRP 1.6 [95% CI, −0.2 to 4.1], control 0.8 [95% CI, −1.1 to 2.7], $P=.05$ for both). In an assessment of the change within each treatment arm at 6 weeks, the PRP group showed a statistically significant improvement in total FSFI score compared with baseline, whereas the control group did not have a statistically significant change from baseline total FSFI score (Table 3).

In an assessment of the treatment arm alone, the PRP group demonstrated a statistically significant increase in FSFI subdomain scores for desire at 6 weeks and for arousal, lubrication, and orgasm at 6 weeks and 6 months compared with baseline (Table 3). The control group demonstrated a statistically significant increase only in the arousal score at 6 months relative to baseline (Table 3). However, when PRP was directly compared with control, none of the subdomain score changes were statistically significantly different between the two groups (Table 2).

Table 3 shows the percentage of participants achieving the minimal important difference by time point and treatment arm. Only the PRP group demonstrated a change in median FSFI orgasm subscale

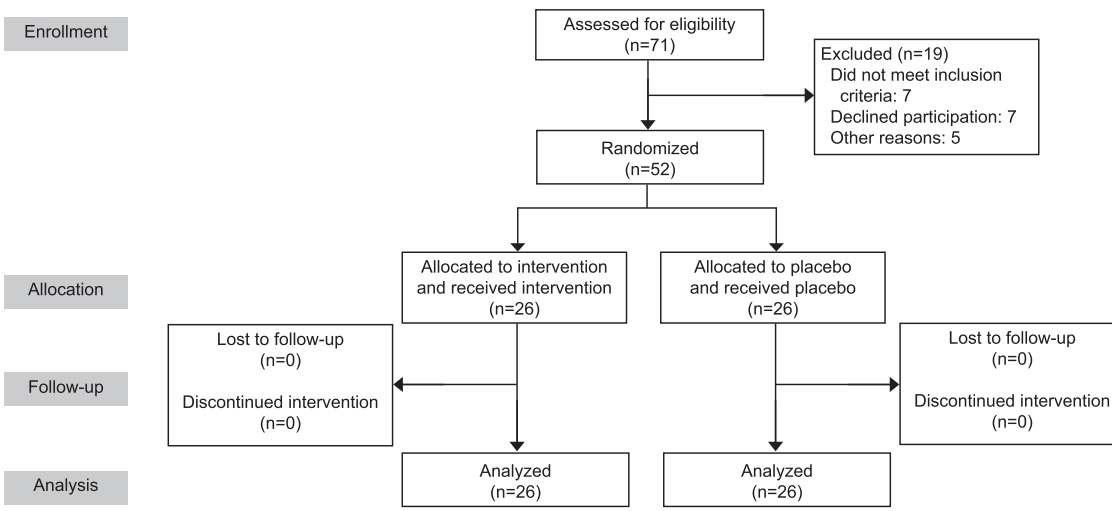

Fig. 2. CONSORT (Consolidated Standards of Reporting Trials) flow diagram.
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Table 1. Participant Characteristics by Treatment Cohort

	PRP Group (n=26)	Control Group (n=26)	*P*
Baseline characteristics			
Age (y)			.2
18–29	11 (42)	6 (23)	
30–39	11 (42)	12 (46)	
40–50	4 (15)	8 (31)	
Cis-gender woman	26 (100)	26 (100)	
Sexual orientation			.1
Heterosexual	21 (81)	19 (73)	
Homosexual	2 (8)	0	
Bisexual	2 (8)	6 (23)	
Other	1 (4)	1 (4)	
Race*			.1
Asian	1 (4)	2 (12)	
Black	12 (46)	8 (31)	
White	14 (54)	13 (50)	
None of the above	3 (12)	4 (16)	
Hispanic ethnicity	3 (12)	2 (8)	>.9
Sexual activity			
Vaginal penetrative intercourse	26 (100)	25 (96)	>.9
Anal receptive intercourse	3 (12)	5 (19)	.7
Oral intercourse	20 (77)	21 (81)	.7
Masturbation	20 (77)	21 (81)	.7
Procedure information			
Volume injected (mL)			
2	2 (8)	0	
3	12 (46)	11 (42)	
4	12 (46)	15 (58)	
Any AE	4 (15)	2 (8)	
Vaginal odor	2 (8)	0	
Vaginal discharge	0	1 (4)	
Pain	2 (8)	1 (4)	

PRP, platelet-rich plasma; AE, adverse event.
Data are n (%) unless otherwise specified.
* Participants were able to select more than one race category from a list of options, leading to numbers adding to more than 26 for each group. Race and ethnicity data were collected to help characterize the study population.

score that was greater than the minimal clinically important difference of 0.5 at 6 weeks and 6 months.

At 6 weeks, participants who received PRP reported more improvement in their sexual function compared with control based on PGI-I score, with 69.2% of participants in the PRP arm reporting some level of improvement compared with 42.3% in the control arm, although this was not statistically significant (P=.05). This difference was found to be significantly different at 6 months, with 69.2% of the PRP arm reporting improvement compared with 34.6% of the control arm (P=.01).

There was no significant change in number of sexual encounters per week in either arm (P>.5), and overall, there were low rates of adverse events, with no difference in total adverse event between arms (Table 1). No serious adverse events were reported in either group. The median VAS pain score during treatment for the PRP arm was significantly higher compared with the control arm (PRP 5.5 [95% CI, 4.0–6.0], control 3.0 [95% CI, 2.0–4.0], P<.001).

DISCUSSION

This single-blind, sham-controlled, randomized comparative-effectiveness trial provides compelling data demonstrating that PRP injections may be a safe and effective treatment to improve desire and orgasm in premenopausal sexually active women 18–50 years of age without severe sexual dysfunction. Although our primary outcome of total FSFI score did not reach the minimal clinically important difference, other outcomes such as PGI-I score did show greater improvement in the PRP arm than the control arm. Our study showed no serious adverse events from PRP injection, adding to the literature that PRP is an overall low-risk intervention.[25]

Although FSFI subdomain changes were not statistically significant after adjustment for multiple

Table 2. FSFI (Female Sexual Function Index) Scores and PGI-I (Patient Global Impression of Improvement) Improvement by Treatment Arm at Each Timepoint Independently and Comparatively

	Control Group (n=26)			PRP Group (n=26)		
	Baseline	6 wk	6 mo	Baseline	6 wk	6 mo
Total FSFI score	25.6 (23.3–27.4)	25.8 (23.6–27.7)	26.3 (24.0–28.2)	25.2 (22.6–26.9)	27.4 (25.6–29.0)	26.8 (25.0–28.4)
Desire	3.3 (3.0–3.7)	3.2 (2.8–3.6)	3.4 (3.1–3.9)	3.4 (3.1–3.9)	4.0 (3.4–4.6)	3.6 (3.3–4.3)
Arousal	4.3 (3.8–4.9)	4.6 (4.0–5.1)	4.9 (4.3–5.3)	4.3 (3.7–4.9)	5.0 (4.5–5.4)	4.9 (4.3–5.3)
Lubrication	5.3 (4.7–6.0)	5.5 (5.0–6.0)	5.6 (5.1–6.0)	4.5 (3.9–5.1)	5.2 (4.6–5.6)	5.1 (4.5–5.5)
Orgasm	4.2 (3.6–4.8)	4.5 (4.0–5.3)	4.6 (4.0–5.3)	4.1 (3.3–4.7)	5.1 (4.3–5.6)	4.9 (4.2–5.5)
Satisfaction	4.8 (4.2–5.2)	4.6 (3.9–5.0)	4.6 (3.9–5.0)	4.6 (4.0–5.1)	4.8 (4.2–5.2)	4.5 (3.8–5.0)
Pain	2.7 (2.6–2.9)	2.6 (2.6–2.7)	2.6 (2.6–2.7)	2.8 (2.7–3.1)	2.7 (2.6–2.9)	2.7 (2.6–2.9)
PGI-I improved	—	11 (42)	9 (35)	—	18 (69)	18 (69)

	PRP vs Control			
	6-wk vs Baseline*	6-mo vs Baseline	Unadjusted $P^{\dagger}$	Adjusted $P^{\ddagger}$
Total FSFI score	1.9 (−0.5 to 5.1)	0.8 (−1.5 to 3.7)	.05	.05
Desire	0.7 (0.1–1.3)	0.2 (−0.3 to 0.9)	.67	1.00
Arousal	0.5 (−0.3 to 1.2)	0.1 (−0.6 to 0.8)	.11	1.00
Lubrication	0.4 (−0.3 to 1.1)	0.2 (−0.5 to 0.9)	.28	1.00
Orgasm	0.6 (−0.1 to 1.3)	0.4 (−0.3 to 1.1)	.61	1.00
Satisfaction	0.4 (−0.3 to 1.2)	0.1 (−0.7 to 0.9)	.19	1.00
Pain	0.0 (−0.3 to 0.2)	−0.1 (−0.4 to 0.2)	.52	1.00
PGI-I improved	—	—	—	

PRP, platelet-rich plasma; FSFI, Female Sexual Function Index; PGI-I, Patient Global Impression of Improvement.
Data are median (95% CI) or n (%) unless otherwise specified.
* The difference in medians showing the first group median minus the second group median (95% CI) estimated from the proportional odds models.
† *P* values unadjusted for multiple testing based on the overall test treatment arm–by–time interaction from the proportional odds model.
‡ *P* values adjusted for multiple testing with the Holm procedure.

analyses, raw scores consistently favored PRP over sham in desire, arousal, lubrication, and orgasm. Notably, orgasm improvement in the PRP arm reached the minimal important difference at both 6 weeks and 6 months, indicating clinical significance. Although we were not powered to adequately detect a difference in subdomain scores, these findings provide compelling preliminary data to inform and support further study within a larger sample size to determine whether these findings are replicable and to further assess for statistically significant and clinically relevant differences.

Our study showed more modest improvements in total FSFI score than most previous studies. In the original pilot study, Runels et al[14] found that total FSFI score increased by a mean of 5.5 points after PRP injections, and Sukgen et al[13] found an increase of 14 points; both were significantly higher than the 2.2-point increase seen in our study. One possible explanation for this observed difference is that both prior studies used periclitoral injections in addition to anterior vaginal wall injection, which could account for the greater increase in FSFI score. Future trials should consider including periclitoral injections, although their safety and tolerability in this setting remain unclear and underinvestigated. In 2025, Atlihan et al[26] published a randomized controlled trial comparing vaginal PRP with vaginal estrogen for vaginal atrophy. They found significant difference in FSFI score, with a 1.37-point improvement at 12 weeks, which is more in line with our findings.

In other gynecologic studies of PRP, FSFI score has been included as a clinical outcome, and our study contributes to the emerging literature on this topic. Our results are in line with a recent systematic review of PRP for pelvic floor disorders that showed a significant improvement in total FSFI and orgasm scores, although this review included mainly retrospective cohort studies.[25] In 2024, Boero et al[27] published a prospective single-arm trial of 50 women who underwent vulvar PRP for lichen sclerosis and included FSFI score as an outcome. In this trial, each

Table 3. Difference in Median and Percentage of Participants Reaching the Minimal Important Difference FSFI (Female Sexual Function Index) Total and Subdomain Scores for Saline and Platelet-Rich Plasma

	Control Group(n=26)					
Outcome	6-wk vs Baseline*	MID Reached	P†	6-mo vs Baseline	MID Reached	P
Total FSFI	0.3 (−1.7 to 2.3)	3 (11.5)	.74	0.8 (−1.1 to 2.7)	3 (11.5)	.39
Desire	−0.1 (−0.5 to 0.2)	5 (19.2)	.6	0.1 (−0.2 to 0.4)	9 (34.6)	.68
Arousal	0.3 (−0.3 to 0.8)	4 (15.4)	.33	0.6 (0.0–1.0)	6 (23.1)	.05
Lubrication	0.3 (−0.1 to 0.8)	4 (15.4)	.19	0.3 (−0.1 to 0.9)	4 (15.4)	.14
Orgasm	0.3 (0.0–0.9)	11 (42.3)	.09	0.4 (0.0–0.9)	8 (30.8)	.07
Satisfaction	−0.3 (−0.8 to 0.3)	3 (11.5)	.33	−0.2 (−0.8 to 0.3)	5 (19.2)	.41
Pain	−0.1 (−0.3 to 0.0)	0	.15	−0.1 (−0.3 to 0.0)	1 (3.8)	.24
	PRP Group(n=26)					
Outcome	6-wk vs Baseline	MID Reached	P	6-mo vs Baseline	MID Reached	P
Total FSFI	2.2 (0.6–4.8)	7 (26.9)	.01	1.6 (−0.2 to 4.1)	7 (26.9)	.07
Desire	0.6 (0.1–1.1)	11 (42.3)	.02	0.2 (−0.1 to 0.9)	8 (30.8)	.17
Arousal	0.8 (0.2–1.2)	9 (34.6)	.003	0.7 (0.1–1.1)	6 (23.1)	.02
Lubrication	0.7 (0.2–1.2)	5 (19.2)	.01	0.5 (0.1–1.0)	6 (23.1)	.02
Orgasm	1.0 (0.4–1.5)	11 (42.3)	<.001	0.8 (0.3–1.3)	12 (46.2)	<.001
Satisfaction	0.2 (−0.4 to 0.7)	6 (23.1)	.55	−0.1 (−0.7 to 0.5)	5 (19.2)	.71
Pain	−0.1 (−0.4 to 0.1)	1 (3.8)	.20	−0.1 (−0.4 to 0.1)	2 (7.7)	.16

PRP, platelet-rich plasma; MID, minimal important difference; FSFI, Female Sexual Function Index.
Data are median (95% CI) or n (%) unless otherwise specified.s
* The difference in medians showing the follow-up median minus the baseline median (95% CI) estimated from the proportional odds models.
† *P* values are from the test for difference from baseline at each time point within each treatment arm based on the proportional odds model.

participant received three PRP injection treatments 4–6 weeks apart. The authors found a significant improvement in FSFI subdomain scores for desire, satisfaction, lubrication, and pain at 6 months after treatment. Their observed improvement in the pain and satisfaction subdomains may be attributable to the different injection area or to the baseline presence of lichen sclerosis and the potential improvement of this autoimmune disease–related symptoms with PRP therapy. Our study showed potential for a possible improvement in orgasm and theirs did not, which may suggest that the vaginal site for the injection may be a more optimal injection point for orgasm effect.

Currently, there is no consensus about how often PRP should be administered. The study by Runnels et al[14] was based on a single application, whereas Sukgen et al[13] included four injections. In our study, total FSFI and all FSFI subdomain scores peaked at 6 weeks and were lower at 6 months compared with 6 weeks, although they still improved from baseline. This suggests that PRP may be a temporary therapy with need for reinjection after several months to maintain effect. Future studies should investigate both the frequency and the number of injections to further clarify how this treatment performs over time.

The VAS score for the PRP arm was significantly higher than for the sham arm and reached the minimal important difference of 1.0. Although gynecology does not have a set acceptable VAS score, our finding of 5.5 is above the general postoperative VAS score of 3.3.[28] For reference, an endometrial biopsy has been found to have a VAS of 3.2–5.1, so pain from PRP injection may be an analogous to pain from endometrial biopsy.[29,30] We did not use any additional pain analgesic or anesthetic before anterior vaginal wall injection, and we anticipate that using analgesia would reduce VAS scores.

This study has several strengths, including the use of the gold-standard randomized control trial design with participants blinded to treatment arm. We used validated questionnaires to evaluate sexual function and satisfaction. Limitations include a relatively small sample size and the specified exclusion criteria, including postmenopausal status and baseline FSFI score less than 14.4, so our results may not be applicable to postmenopausal women, particularly because sexual dysfunction has been found to increase after

Authors' Data Sharing Statement

Will individual participant data be available (including data dictionaries)? *No.*

What data in particular will be shared? *Not available.*

What other documents will be available? *Not available.*

When will data be available (start and end dates)? *Not applicable.*

By what access criteria will data be shared (including with whom, for what types of analyses, and by what mechanism)? *Not applicable.*

menopause and likely has different causes in a postmenopausal and premenopausal populations.[31] All injections were done at a single center and with the same PRP preparation, limiting the generalizability of the study. In addition, the person performing the injections was not blinded to the treatment arm, possibly introducing bias.

Data on sexual function after PRP in premenopausal women are limited; this randomized trial contributes prospective evidence to this population. Our data showing that PRP had more improvement in PGI-I scores and potential for FSFI subdomain score improvement warrant further research in this understudied field.

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