

# O-Shot: Platelets Rich Plasma in Intimate Female Treatment

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#### Abstract

**Background and objectives:** This pilot study measures the response of women with stress incontinence, overactive bladder, lubrication and sexual dysfunction (libido, arousal, dyspareunia) to evaluate the safety, tolerability and clinical efficacy of "O-Shot" Platelets Rich Plasma (PRP) of the vulvo vaginal field. PRP has recently been shown to accelerate rejuvenate aging skin by various growth factors and cell molecular adhesions. Each patient received two sessions at the intervals of two months apart.

**Material and methods:** This is a first prospective study in Brazil, in a private clinic, non-randomized controlled, in non-selected 68 women performed by the same doctor (author) between August 1<sup>st</sup> 2016 to February 1<sup>st</sup> 2017. All Patients were fully informed of the therapeutic innovation of the PRP injection (O-Shot) and consented to the procedure. Sixty-eight women, non-select ages of 32-97 (average: 62.8 years old) were included in this pilot study and self-reported having stress incontinence (13 patients), overactive bladder (15 patients), mixed (22 patients), lack of lubrication and sexual dysfunction (libido, arousal, dyspareunia). Detailed history, physical examination, questionnaire, neurological tests, urine sample, Q-tip test and stress test were performed. All patients were followed by the author each two weeks until the end of protocol. The protocol was based on two sessions of Platelet Rich Plasma (O-Shot) two months apart, no matter if the patient was satisfied or not with the first session.

**Results:** About sixty-eight women in the age ranging from 32 to 97 (average: 62.8 years old) were enrolled in this study. Of the sixty-eight patients, 94% of them were satisfied, only 6% of them with overactive bladder did not have any improvement with this treatment.

**Conclusion:** Platelet Rich Plasma, "O-Shot" is an in-office treatment that is safe, effective, non-surgical, and nonhormonal option for women having stress incontinence, overactive bladder, lack of lubrication, and sexual dysfunction, such as lack of libido, arousal or dyspareunia.

**Keywords:** Dyspareunia; Neurological tests; Rejuvenation; Anorgasmy; Stem cells

#### Introduction

Platelet Rich Plasma (PRP) has been used over last 20 years as an effective treatment in various medical and surgical fields [1]. There are publications about the use of PRP in wound treatment, maxillofacial surgery, soft tissue injuries, orthopedic, gastrointestinal surgeries, burns, and in cosmetic procedures [1,2]. PRP has been demonstrated to be effective with no serious side effects and activates pluripotent cells in the area of injection resulting in rejuvenation [3,4].

Since PRP is autologous, there are no known contraindications and also offers the advantage of flowing into tissue. There are several growth factors and cytokines [5,6] in the platelets that are released to cellular damage starting to work together stimulating process of fibroblast collagen synthesis. This pilot study measures the responses of women with stress incontinence, overactive bladder, varying degrees of sexual dysfunction (libido, orgasm, and dyspareunia) and lack lubrication.

#### Material and Methods

About 68 non-selected women, ages 32-97 (average: 62.8 years old) G 60/Para 48/Abortation 27 were enrolled in this pilot study from August 1<sup>st</sup> 2016 to February 1<sup>st</sup> 2017 with complaints of urinary problems such as urinary stress incontinence, overactive bladder (OAB), lack of lubrication and sexual dysfunction (lack of libido, decreased arousal, dyspareunia and anorgasmy) (Table 1).

All sixty-eight women were treated by the author and underwent to have a Platelet Rich Plasma "O-Shot" (Dr. Charles Runels Patent) as proposal protocol treatment getting two session two months apart.

All patients work up:

- Detailed history
- Physical examination (by the author)
- Answer a questionnaire (Figure 1)
- Neurological exam (abdominal reflexes, sensorial problems)
- Urine sample (urinalysis and culture)
- Q-tip test and stress test

Cure to urinary complaints was defined as complete subjective relief of urinary incontinence (stress/overactive bladder) and absence of loss urine on physical examination. Those complaints of lack of lubrication

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and a questionnaire answered were used as a treatment response. Symptoms Patients Average Age USI+OAB+LUB 15 56-88 75.6 4 46-75 OAB 67 USI+OAB+2° ANORG+LUB+AROU+LIB+DYSP 7 36-67 534 OAB+2° ANORG+LUB+LIB+AROU 5 45-87 64

and sexual dysfunction a subjective improvement of their symptoms

OAB+LUB+AROU+LIB 6 69-97 83.1 USI+LUB+AROU+LIB 13 38-74 55.3 ATR+LUB+DYSP 10 33-73 59.7 1° ANORG+LUB+AROU+LIB+DYSP 2 32-64 48 2° ANORG+I UB+AROU+I IB+DYSP 6 55-77 63 68 62.8 Total 32-97

**Table 1:** List of patients with different complaints (USI: Urinary StressIncontinence; LUB: Lack of Lubrication; AROU: Arousal; DYSP:Dyspareunia; OAB: Overactive Bladder; ANORG: Anorgasmy; LIB:Lack of Libido; ATR: Atrophy).

Symptoms	Yes	No
Stress Incontinence		
Over active Bladder		
Lack of Lubrication		
Lack of Libido		
Atrophy		
Anorgasmy 1° or 2°		
Dyspareunia		
Arousal		

Figure 1: Questionnaire indicating symptoms.

Your goals were achieved with this protocol-Very pleased: Yes/No; Not pleased: Yes/No



Figure 2: Syringes to be used and Centrifuge used for separation of blood cells.

Equipment's used for the procedure include 5 cc syringes (Figure 2), 30 G ½ needles,10% calcium chloride, Vacutainer kit-vacuum collection tube with separator gel, Butterfly 23 G, Centrifuge (Figure 2), Numbing cream (topic anesthesia): 20% Benzocaine, 6% Lidocaine and 4% Tetracaine.

# Technique

Peripheral blood was drawn from the arm (Figure 3) and a numbing cream Benzocaine 20%; Lidocaine 6%; Tetracaine 4% was used in the vulvo vaginal area.



Figure 3: Collection of peripheral blood from the arm.

The kit was equipped with a butterfly 23 G needle, Vacutainer Kit, 10% calcium chloride, 5 cc syringe and 30 ½ needle. 8 cc blood sample was aspirated from the patient's peripheral vein in vacuum collection tube with separator gel, which is centrifuged separating red and white cells at 3.100 RPM for 9 minutes. Platelet cells were on top of the tube and the 4 cc of cells suspension are called Platelet Rich Plasma (PRP) (Figure 4).



Figure 4: Centrifuged blood sample.

After isolation of the PRP, 10% of calcium chloride 0.2 cc is added to the 4 cc of PRP (Figure 5) and injected by a 5 cc syringe with 30 G  $\frac{1}{2}$ needle into the following anatomic areas: 2 cc in Pubocervical fascia (G-Spot); 0.5 cc in Skene's gland each and 1 cc in to the clitoral area (button part of the clitoris) (Figure 6). The average procedure time was 15 minutes and no prophylaxis antibiotics were used.

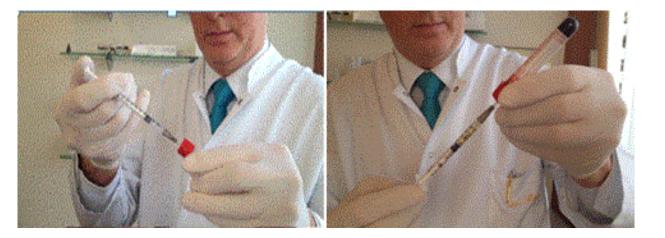


Figure 5: Addition of 10% Calcium chloride to the PRP.



Figure 6: Procedure for PRP injection.

# Results

About sixty-eight women were treated by PRP ("O-Shot" 2 sessions, 2 months apart) in the first non-randomized pilot study in the Southern Brazil, from August 1st 2016 to February 1st 2017 in a private clinic, in Porto Alegre, RS-Brazil. Around 94% (64 patients) were satisfied with the outcome reporting subjectively and by a questionnaire improvement of lubrication and sexual dysfunction (arousal, libido, dyspareunia and anorgasmy) on the first session and getting better after the second PRP Shot. Those complaints stress urinary stress urinary incontinence (13 patients) reported more than 90% of relief of the symptoms. It was amazing and surprising that these patients related great deal of benefits after 2 weeks of the first "O-Shot". Patients with overactive bladder (15 patients) had 74% of relief of symptoms and 6% (4 patients) have no treatment response. All females with mixed urinary incontinence (22 patients) were satisfied with the results. Cure was defined (urinary problems: stress incontinence, overactive bladder and mixed incontinence) as complete subjective relief of urinary incontinence, questionnaire and absence of loss urine on physical examination.

#### Side-effects

We have no extreme sexual arousal or ejaculating problem. None of our patients were lost within the 6 month follow up period, and the procedure was well tolerated without serious side effects. Burning sensation were exposed by 100% of our patients when injection in para urethral areas and clitoris.

#### Discussion

The use of Platelet Rich Plasma (PRP) has been known in aesthetic medicine. PRP is an autologous preparation of platelets in concentrated plasma that contains a mixture of bioactive agents derived from both platelet and plasma. When PRP is activated (calcium chloride), and injected in to the anatomic areas such as clitoris; pubo-cervical fascia; G spot; Skene's glands, then growth factors may cause differentiation of pluripotent stem cells resulting in neo-angiogenesis, fibroblast growth, and neuronal growth, improving physiologic responsiveness. PRP is non-antigenic and contains no synthesis agents that could cause an untoward local or systemic reaction. We could find no reports of granuloma formation, infections,

or local tissue necrosis. The body will not react to it immunologically [7]. No allergic reactions. PRP induces regrowth of new tissues by of the activation of pluripotent stem cells. [7,8] Improved vascularity and neuronal regrowth in the vagina and in the clitoral area could restore or possibly enhance sexual responsiveness and sensitivity by increasing blood flow. Collagen and sensory nerve regrowth might relieve coital discomfort as well as enhance vaginal sensitivity. It is a great benefit to those suffering with stress incontinence and overactive bladder, rejuvenating the entire surrounding area to the urethra, pubo-cervical fascia and Skene's glands. It seems to last around 1-2 years.

# Conclusion

Platelet Rich Plasma is a safe non-surgical, cost-effective procedure to be utilized as a new tool to help patients with stress incontinence, overactive bladder and sexual dysfunctions.

### References

 Redaelli A (2010) Face and neck revitalization with Platelet Rich Plasma (PRP): Clinical outcome in a series of 23 consecutively treated patients. J Drugs Dermatol 9: 466-472.

- 2. Banihashemi M, Nakhaeizadeh S (2014) An introduction to application of PRP in skin rejuvenation. Rev Clin Med 1: 38-43.
- 3. Shin MK, Lee JH, Lee SJ, Kim NI (2012) Platelet Rich Plasma combined with fractional laser therapy for skin rejuvenation. Dermatol Surg 38: 623-630.
- Sclafani AP, Steven A, Cormic SA (2011) Induction of dermal collagenesis, angiogenesis and adipogenesisis human skin by injection of platelet rich fibrin matrix. Arch Facial Plast Surg 14: 132-136.
- 5. Sclafani AP (2011) Safety, efficacy and utility of platelet rich fibrin matrix in facial plastic surgery. Arch Facial Plastic Surg 13: 247-251.
- Runels C, Melnick H, Debourbon E, Roy L (2014) A pilot study of the effect of localized injections of autologous Platelet Rich Plasma (PRP) for the treatment of female sexual dysfunction. J Womens Health 3: 169.
- Nakudo N, Minakata T, Mitsui T, Kushida S, Notodihardjo FZ, et al. (2008) Proliferation promoting effect of PRP on human adipose- derive stem cells and human dermal fibroblast. Plast Reconstr Surg 122: 1352-1360.
- Anitua E, Sanchez M, Zalduendo MM, Prado R, Orive G, et al. (2009) Fibroblastic response to treatment with different preparations rich in growth factors. Cell Prolif 42: 162-170.

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