

# P Shot for Penile Enhancement and Sexual Rejuvenation for Men

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**Abstract:** ***Introduction:** A great number of men who demand p shot for increasing penile length and circumference have an efficient and acceptable sized penis but imagine their penises as small. **Objectives:** The goal of this study is to assess the effect of repeated intra-cavernosal injection with plasma rich growth factors (PRGF) on penile size and length. **Materials and methods:** During a period of 2017-2018 years, 72 patients have under gone p shot procedure using PRGF for penile enhancement; only 58 patients have completed the recommended protocol. **Results:** There was a statistically significant increase in flaccid penile length, flaccid penile girth and stretched penile length after PRGF injection. **Conclusion:** The repeated use of intra-cavernosal injections with PRGF enhance the penile length and size of men.*

**Keywords:** P shot, PRGF, intra-cavernosal injection, penile size, penile length.

## 1. Introduction

Penis size is a cause of worry for men. Most men require to enlarge their penises in order to feel self-confidence or to satisfy their partners [1,2]. Measurement of penile length and girth is important to assess penile enhancement procedures. The size of the flaccid penis is much more important than the erect size for males with psychological dysmorphism. The normal adult flaccid penis is 7.6 - 13.0 cm in length and 8.5 - 10.5 cm in girth. The length of erect penis is 12.7-17.7 cm, and the girth is 11.3-13.0 cm [1,3, 4].

Platelet rich plasma (PRP) is prepared from the patient's blood after centrifugation, giving plasma with a high platelet concentration [5]. Autologous PRP has been safely used in plastic and reconstructive surgery, maxillofacial surgery and orthopaedics [6].

PRGF technology is a new approach using autologous platelet-enriched plasma free of leucocytes. Activated platelets release numerous growth factors (including vascular endothelial growth factor, platelet-derived growth factor, fibroblast growth factor, transforming growth factor beta, insulin-like growth factor, epidermal growth factor and hepatocyte growth factor), which stimulate differentiation and promote angiogenesis; also decreasing pain and inflammation [6,7, 8]. PRGF has been widely used in plastic and reconstructive surgery [9], for wound healing and tissue regeneration in sport medicine and orthopaedics [10], maxillofacial surgery, dentistry, oral implantation and ulcer healing [11,12,13].

P-shot is attributed to Priapus, the Greek God of fertility. It is a series of injections designed to improve the size of the penis and sexual function in men. In this study, intracorporeal injection of PRGF and the technique of priapus shot that we used for penile enhancement will be described.

## 2. Patients and Methods

During a period of 2017-2018 years, 72 patients have under gone p shot procedure for penile enhancement, only 58

patients have completed the recommended protocol. All patients were subjected to history taking, clinical examination, looking for risk factors including hypertension, hyperlipidemia, obesity and metabolic syndrome.

Genital examination: to evaluate the testicular size and consistency, presence of penile plaques or abnormalities and measurement of penile flaccid length and girth. The penile stretched flaccid length is measured from the pubic bone to the glans. This is achieved by pulling on the glans and dipping the ruler in pubic fat to reach the pubic bone. The girth is measured using a tape.

### P-Shot Procedure Using Plasma Rich Growth Factors (PRGF):

Around 60 ml of the patient's blood is taken under proper aseptic precautions. Blood sample was obtained from basilic vein using a large needle to avoid platelet rupture. Sampled blood (10 ml) was combined with anticoagulant sodium citrate (1 ml of 3.8%), then centrifuged at 460 G in 8 minutes. After the centrifugation, PRGF was taken from the bottom of the tube. PRGF is activated with a few drops of calcium chloride to trick the polymerisation so they release growth factors [14].

The P-Shot procedure is quick, safe and easy to perform. Local anaesthetic, preferably lidocaine, is applied to the glans and shaft of the penis, left for 30 minutes. Intracorporeal injection of PRGF and pellets is done while the patient is lying in the supine position. According to the length of the penis, about 3 points of injections, 3ml each, using 3ml syringes with a 30 gauge needle. The layers penetrated include skin, Colle's fascia, dartos muscle then a thin membrane. Flaccid penile length and circumference were measured before intra-corporeal injection and one month after the injection.

## 3. Statistical Analysis

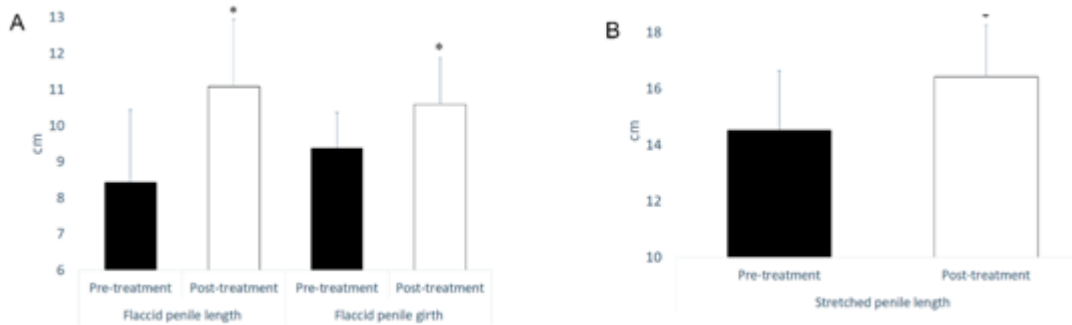
Statistical analysis were performed using the software SPSS version 23.0 (SPSS, Inc., Chicago, IL). Paired t-test was used to compare measurements before and after PRP injection. Pearson correlation was used to determine the association

between age and each of difference in flaccid penile length, flaccid penile girth and stretched penile length. P value < 0.05 was considered significant.

#### 4. Results

The mean age of male patients who underwent penile PRP injection (N=58) was  $36.91 \pm 11.07$  years, with a range of 20-64 years. Our results showed that both flaccid penile length and girth were significantly increased after PRGF therapy for one month ( $p < 0.001$ ). Flaccid penile length was

increased from  $8.43 \pm 2.01$  cm to  $11.08 \pm 1.86$  cm. The girth was increased from  $9.37 \pm 0.99$  cm to  $10.59 \pm 1.29$  cm. The stretched penile length was also significantly increased from  $14.51 \pm 2.12$  cm to  $16.42 \pm 1.84$  cm ( $p < 0.001$ , Figure 1). The mean differences of the measured outcomes between baseline and post-treatment status are shown in Table 1. The association between age and any of differences in flaccid penile length, flaccid penile girth or stretched penile length was statistically insignificant ( $p > 0.05$ ).



**Figure 1:** A) shows significant increase in flaccid penile length and girth after PRGF treatment for one month ( $p < 0.001$ ). B) shows significant increase in stretched penile length after PRGF treatment for one month ( $p < 0.001$ ).

**Table 1: Mean difference  $\pm$  SD of flaccid penile length, flaccid penile girth and stretched penile length before and after PRGF injection (Paired Sample Test).**

Parameter	Mean Difference $\pm$ SD (Cm) N=58	95% Confidence Interval of the difference		T	df	Sig. (2-tailed)
		Lower	Upper			
Flaccid penile length before PRGF Flaccid penile length after PRGF	2.72 $\pm$ 1.30	3.142	2.307	13.201	39	.000
Flaccid penile girth before PRGF Flaccid penile girth after PRGF	1.22 $\pm$ 1.02	1.552	0.897	7.559	39	.000
Stretched penile length before PRGF Stretched penile length after PRGF	1.61 $\pm$ 1.09	1.968	1.267	9.335	39	.000

#### 5. Discussion

The penis size has been considered a symbol of masculinity [15, 16]. Although most men have normal sized penises; penile length and girth may cause anxiety, lack of self-confidence, and impairment of sexual function [17].

Penile enhancement surgery is a highly risky procedure. Several techniques have been described to increase penis length. Various complications as penile deformity after cutting the suspensory ligament, donor site scar after dermal fat graft, as well as graft tissue necrosis [18,19]. Penile injection of different materials has been tried for penile lengthening, such as hyaluronic acid, collagen, silicone, and autologous fat [19-21]. Injections of fat are ineffective due to poor blood supply and significant number of adipocytes is ruptured or reabsorbed leaving only 10% of the fat cells intact [19].

Silicone injection has not been recommended, because of the large volumes injected, penile distortion, idiosyncrasy, granulomatous reactions [22,23]. Mild adverse reactions were reported as regard Lipen-10, dextran and polymethyl methacrylate. However, more studies should be done to prove their efficacy in penile enhancement [23].

Highly concentrated platelets in PRP release numerous growth factors [24, 25]. Plasma rich growth factors (PRGFs) are activated by the addition of thrombin and calcium chloride [5, 26, 27]. These growth factors activate pluripotent stem cells that improve vascularity and neuronal re-growth [28,29].

PRP has been widely and safely used to promote natural healing responses and tissue repair in various fields of medicine including gynecologic, orthopaedics, maxillofacial surgery, plastic and reconstructive surgery [30-36]. Applications of PRP in various gynecological disorders including wound healing [35], endometrial growth [37], aesthetic and plastic surgery [38, 39] and female sexual dysfunction [40-43].

In the present study PRGF was used for penile enhancement to improve the size and girth of the penis. Our results showed a statistically significant increase in flaccid penile length, flaccid penile girth and stretched penile length after penile PRGF injection. Intra-corporeal injection with platelets-rich growth factors (P shot) utilizes the healing capabilities of the body's own platelet-rich growth factors that promote healing and induce re-growth of new tissues [44, 45].

PRGF is free of leucocytes, with low levels of proinflammatory cytokines [46] and a high concentration of platelets that release numerous growth factors [46, 47]. Growth factors derived from the patient's own blood were used to rejuvenate the penile tissue, and stimulate enhancement. The procedure is minimally invasive; the patient receives an injection that consists of platelet rich growth factors collected from his blood. Therefore, there is no chance for an allergic reaction or rejection. It is easily performed, simple, non-antigenic and effective treatment [48].

**In conclusion,** penile injection of PRGFs showed a significant enhancement of penile length and girth, without serious adverse events. Further studies for longer duration may be needed to assure the efficacy and safety of PRGF for penile enhancement.

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