LeDerm Laser & Medical Aesthetics

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Platelet Rich Plasma (PRP) for Hair Restoration FAQ

Is PRP Safe for Older People with Hair Loss?

PRP (Platelet Rich Plasma) is safe for persons of any age, although we don't administer it to pregnant women and those under 18. It can be helpful as long as the person has enough miniaturized hair for it to work on. It will not work on a totally bald area of the scalp.

Miniaturization is the hormone-driven biological process in which hairs shrink in size over time, eventually leaving a bald scalp.

How are PRP Treatments Different at LeDerm?

There are three reasons Platelet Rich Plasma (PRP) treatments are different at LeDerm from other facilities. First, we use the Purespin PRP System, the most sophisticated system for the preparation of Platelet Rich Plasma. Second, by using a double centrifuge technique, we generate the optimal concentration of growth factors in PRP. Third, and most important, we have the knowledge to know when PRP is appropriate and the skill to inject the proper quantity of PRP at just the right depth to achieve the desired result — a skill that cannot be overstated.

Can I Have PRP During a Hair Transplant?

The wounds created in the hair transplant procedure (recipient site creation) promote blood platelet migration and the activation of growth factors making PRP therapy unnecessary for the actual surgery. That said, doctors may wish to use PRP for areas of the scalp that are thinning, but were not addressed by the hair transplant. An example might be using PRP for the crown if the doctor only transplanted hair to the front part of the scalp.

What is Platelet-Rich Plasma (PRP) and How Does It Promote Hair Growth?

Blood plasma holds the blood cells in a liquid suspension. Blood plasma makes up about 55% of the body's total blood volume. There are three basic types of blood cells: red blood cells (that carry oxygen), white blood cells (that have immune functions to help fight infection) and platelets (that facilitate coagulation, wound healing and repair).

Can I Have Platelet Rich Plasma Therapy Instead of Hair Transplant Surgery?

PRP will generally be inadequate for patients who are candidates for a hair transplant. PRP works to reverse (thinning hair) as do other medical treatments (Propecia, Rogaine, LLLT). Unfortunately, medical treatments do not grow hair back once it has been lost.

Does Platelet Rich Plasma (PRP) Therapy For Hair Loss Involve Surgery?

Platelet rich plasma (PRP) therapy for hair loss is performed during a simple office visit, takes about 30-45 minutes, and does NOT involve surgery.

Are There Any Side Effects or Safety Concerns in Using PRP to Treat Hair Loss?

PRP is a therapy that has been used since 1987 to help promote the healing of hard tissue (bone, joints) and soft tissue (skin). To date, there have been no reported major side effects.

How Does Platelet Rich Plasma (PRP) Treat Androgenic Alopecia?

In theory, platelet rich plasma (PRP) stimulates the growth of hair follicles by reversing the hair miniaturization (thinning hair) process seen in androgenic alopecia (common baldness).

While it is not exactly known how PRP reverses miniaturization, researchers do have a few ideas. First, PRP may counteract miniaturization by prolonging the growth (anagen) phase of hair follicle. Second, PRP has been observed to increase the number of stem cells in hair follicles. This is known to help protect a hair follicle from apoptosis, a natural process of programmed cell death. Researchers think that this anti-apoptotic effect could stimulate new hair growth. Finally, PRP treatment has been observed to promote growth of new blood vessels around treated hair follicles. Researchers have suggested that this could also stimulate new hair growth.

In sum, a number of factors may come into play to effect new hair growth during treatment with platelet rich plasma.

Kahen, John (ISHRS 2015). "The Use of Platelet Rich Plasma in Treating Hair Loss." Hair Transplant Forum International. 25 (5): 189

Is There Any Research on Platelet Rich Plasma (PRP) As A Hair Loss Treatment?

Two recent studies published in 2014 have presented preliminary evidence that platelet rich plasma (PRP) therapy may stop or reverse genetic hair loss (androgenetic alopecia) in both males and females.

The first study, published in the medical journal Dermatologic Surgery, found at least some improvement in male and female patients with androgenetic alopecia. This study concluded that 47% of those patients experienced at least moderate to very good improvement, 1 a level that the researchers defined as "clinically important." Because this was just a pilot study without a control group, the authors could not reliably claim that PRP was effective in treating hair loss.

References:

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Takikawa M, Nakamura S, Nakamura S, Ishirara M, Kishimoto S, Sasaki K, Yanagibayashi S, Azuma R, Yamamoto N, Kiyosawa T. Enhanced effect of platelet-rich plasma containing a new carrier on hair growth.Dermatol Surg. 2011 Dec;37(12):1721-9.

Li ZJ, Choi HI, Choi DK, Sohn KC, et al. Autologous platelet-rich plasma: a potential therapeutic tool for promoting hair growth. Dermatol Surg 2012;38:1040–6.

A second study, published in the journal BioMed Research International 2, concluded that treatments of platelet-rich plasma stimulated hair growth in men with pattern hair loss. In this clinical study, the researchers found a statistically significant increase in both hair density and terminal hairs.

References

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A.Trink, E. Sorbellini, P. Bezzola et al., “A randomized, double-blind, placebo- and active-controlled, half-head study to evaluate the effects of platelet-rich plasma on alopecia areata,” British Journal of Dermatology, vol. 169, no. 3,pp. 690–694, 2013.

V. Cervelli, S. Garcovich, A. Bielli, G. Cervelli, B. C. Curcio, M. G. Scioli, A. Orlandi, P. Gentile. “The effect of autologous activated platelet rich plasma (AA-PRP) injection on pattern hair loss: clinical and histomorphometric evaluation,” BioMed Research International Volume 2014.

L. Mecklenburg, D. J. Tobin, S.M¨uller-R¨over et al., “Active hair growth (anagen) is associated with angiogenesis,” Journal of Investigative Dermatology, vol. 114, no. 5, pp. 909–916, 2000.

While more comprehensive testing needs to be done, these studies provide preliminary evidence that platelet rich plasma therapy may stimulate hair growth in patients with male or female pattern baldness.