DS biologicals

Studies

Histologic Evidence of New Collagen Formulation Using Platelet Rich Plasma in Skin Rejuvenation: A Prospective Controlled Clinical Study

RESULTS:

Twenty women ranging in age from 40 to 49 years (mean age, 43.65±2.43 years) were enrolled in the study. The mean optical densities (MODs) of collagen in the pre-treatment, control, and PRP-treated area were measured. They were 539±93.2, 787±134.15, 1,019±178, respectively. In the MOD of PRP, 89.05 percent improvement was found when MOD of PRP was compared with MOD of pre-treatment. The mean MOD of collagen fibers was clearly highest on the PRP side (p<0.001). The PRP-to-saline improvement ratio (89.05% to 46.01%) was 1.93:1. No serious side effects were detected.

CONCLUSION:

PRP increases dermal collagen levels not only by growth factors, but also by skin needling (the mesotherapy technique 'point by point'). PRP application could be considered as an effective (even a single application) and safety procedure for facial skin rejuvenation.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5125953/

Platelet-rich plasma and hyaluronic acid - an efficient biostimulation method for face rejuvenation.

RESULTS:

There was a statistically significant difference in general appearance, skin firmness-sagging and skin texture according to the patients' before and after applications of PRP. A statistically significant correlation was found between the number of injections and overall satisfaction.

CONCLUSIONS:

Compared to the baseline, the PRP and HA injections provided clinically visible and statistically significant improvement on facial skin. The improvements were more remarkable as the injection numbers increased.

https://www.ncbi.nlm.nih.gov/m/pubmed/27595866/?i=2&from=skin%20rejuvenation%20prp

Assessment of the efficacy and safety of single platelet-rich plasma injection on different types and grades of facial wrinkles.

RESULTS:

The mean value of WSRS reduced from 2.90 ± 0.91 before treatment to 2.10 ± 0.79 after 8 weeks of treatment. The most significant results were with younger subjects that have mild and moderate wrinkles of the nasolabial folds (NLFs). Fourteen of seventeen subjects with NLFs showed more than 25% improvement in their appearance. Side effects of PRP treatment were minimal to mild and with excellent tolerability.

CONCLUSION:

Single PRP intradermal injection is well tolerated and capable of rejuvenating the face and producing a significant correction of wrinkles especially the NLFs.

https://www.ncbi.nlm.nih.gov/m/pubmed/27474688/?i=3&from=skin%20rejuvenation%20prp#fft

The Clinical Efficacy of Autologous Platelet-Rich Plasma Combined with Ultra-Pulsed Fractional CO_2 Laser Therapy for Facial Rejuvenation

CONCLUSION:

Patients in the experimental group had faster recovery, less duration of adverse events, and better effects than that in the control group. No other side effects such as petechia, pigmentation, effusion, infection, keloid, blisters, and contact dermatitis were found after treatment. In the process of treatment, patients felt that searing pain caused by laser therapy was relieved by coating with PRP. In summary, combined application could not only effectively reduce facial wrinkles and texture, but also significantly relieve the coarse pores, pigmentation, and erythema caused by laser therapy. PRP and ultra-pulsed fractional CO_2 laser had a synergistic effect on the therapy for facial rejuvenation.

http://online.liebertpub.com/doi/10.1089/rej.2016.1823

Rapid Healing and Reduced Erythema after Ablative Fractional Carbon Dioxide Laser Resurfacing Combined with the Application of Autologous Platelet-Rich Plasma

RESULTS:

Significantly faster recovery of TEWL was seen on the PRP-treated side. The erythema index and melanin index on the PRP-treated side were lower than on the control side. Biopsy specimens from the PRP-treated side showed thicker collagen bundles than those from the control side.

CONCLUSION:

Application of autologous PRP is an effective method for enhancing wound healing and reducing transient adverse effects after FxCR treatment.

http://onlinelibrary.wiley.com/doi/10.1111/j.1524-4725.2011.01916.x/full

Rapid Healing and Reduced Erythema after Ablative Fractional Carbon Dioxide Laser Resurfacing Combined with the Application of Autologous Platelet-Rich Plasma

RESULTS:

During the two months after the last treatment, the average width of the widest striae had decreased from 0.75 to 0.27 mm. In the objective assessment, 71.9% of the participants reported ''good'' or ''very good'' overall improvement. In the subjective assessment, and 72.2% of the participants reported ''very satisfied'' or ''extremely satisfied'' with overall improvement. The only reported side effect was post-inflammatory hyperpigmentation (11.1%).

CONCLUSION:

The plasma fractional radiofrequency and transepidermal delivery of platelet-rich plasma using ultrasound is useful in the treatment of striae distensae.

http://www.ncbi.nlm.nih.gov/pubmed/23057681

Platelet-Rich Plasma Combined with Fractional Laser Therapy for Skin Rejuvenation

RESULTS:

PRP combined with fractional laser increased subject satisfaction and skin elasticity and decreased the erythema index. PRP increased the length of the dermoepidermal junction, the amount of collagen, and the number of fibroblasts.

CONCLUSION:

PRP with fractional laser treatment is a good combination therapy for skin rejuvenation. Keratinocyte and fibroblast proliferation and collagen production can explain the capacity of PRP to increase dermal elasticity.

http://onlinelibrary.wiley.com/doi/10.1111/j.1524-4725.2011.02280.x/full

Response to intradermal autologous platelet rich plasma injection in refractory dermal malesma: report of two cases

CONCLUSION:

Melasma is common among Asian females and it is resistant to conventional therapies. Our study shows that PRP may serve as a source of different growth factors to reduce the pigmentation, in some cases, acting synergistically with conventional therapy. In this case study, minimal side effects were observed with the intradermal PRP injection, with little pain, erythema, oedema and bruises. This case study can serve as a pilot study for PRP injection, as adjunct to other conventional therapy. It will be more beneficial to the melasma patients if multi-centre studies can be done in with a larger sample size with a control group to evaluate the effect of PRP injection in melasma patients with different skin types.

http://jummec.um.edu.my/filebank/published_article/8678/15-03(3).pdf