



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

COMBINATION OF CARBOXYTHERAPY AND PLATELET RICH PLASMA FOR TREATMENT OF ACNE SCARS

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Introduction: Carboxytherapy is injection of carbon dioxide gas subcutaneously for therapeutic purpose. An increased concentration of carbon dioxide at the site leads to decreased binding affinity of oxygen and haemoglobin. Consequently local angiogenic growth factors are released, inducing improved micro-circulation, encouraging lipolysis, and dermal regeneration. Indications for Carboxytherapy are aging skin, periorbital hyperpigmentation, cellulite, stretch marks.

Platelet-rich plasma (PRP) is concentrated autologous solution of plasma prepared from patient's blood. PRP contains platelets that release growth factors and bioactive factors which modulate cell proliferation, angiogenesis and chemotaxis. PRP indications are androgenetic alopecia, acne scars, skin rejuvenation and striae distensae.

Objective: To find out effectiveness of combined treatment of carboxy therapy and PRP in acne scar management.

Materials and Methods: Over a period of 8 months, 20 patients with ice-pick, boxcar scars and rolling scars were subjected to three sessions of carboxy therapy and 3 sessions of PRP with each session placing three weeks apart.

Results: Significant improvement was observed in 83% of patients. Ice-pick scars, saucer scars and rolled scars showed good improvement with improvement in skin tone.

Conclusion: Carboxytherapy was used to improve wrinkles, skin elasticity and circulation in the past. It was also found to be effective in the management of acne scars. Combining with PRP showed added benefit. Combination of Carboxytherapy and PRP is safe and cost effective with better results and less down time in the management of acne scars.

