

EFFECT OF PRP ON SCALP HAIR DIAMETER

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Objectives: To measure the effects of PRP on hair diameter in Pakistani population.

Materials & Methods: The study was conducted in a private setup in the adult patients undergoing PRP treatment. Baseline platelets count were noted for each patient. PRP was prepared using a commercial kit. Three PRP injections were administered in the scalp at 0, 1 and three months interval. The hair caliber was measured in the mid-scalp area using a separate stencil for each patient. The diameter of 10 hair (1 cm sq) were measured randomly using the caliper (two hair on each side of the square and four in the center. After six months of third injection, the hair caliber was measured, and the results were analyzed statistically using Mann-Whitney's test.

Results: Seven males and three females were included in the study. The mean age of the patients was 24.2 years (26.3 years in males and 19.3 in females). The average platelets count was found to be 283,580/ μ L. The mean hair caliber was 37.3 μ m (39.1 μ m in males and 33.0 μ m in females). At the end of the study, the mean hair caliber was found to be 52.3 μ m ($p < 0.01$). The mean hair caliber was 53.9 μ m in males and 48.7 μ m in females ($p < 0.01$). The increase in the hair caliber was noted to be 27.5% more in males and 31.3% more in females ($p < 0.01$).

Conclusion: The PRP injections can increase the hair diameter.

BIOGRAPHY

Muhammad Ahmad is graduated from Quaid-e-Azam Medical College, Bahawalpur, Pakistan in 1997 and completed his training for the fellowship in Plastic Surgery by College of Physicians and Surgeons Pakistan (CPSP) in 2005. He received the merit award by the Australian and New Zealand Burns Association in 2004. He also received the first prize in annual meeting of Asian Association of Hair Restoration Surgeons (AAHRS) held in Bangkok, Thailand in 2017. He has published a new scar assessment scale (Ahmad's cosmetic surgery scar assessment scale). He is the Editor of *Pakistan Journal of Plastic Surgery* (Pakistan) and newsletter of Asian Association of Hair Restoration Surgeons (AAHRS). He is also a reviewer of various international journals. He is the Editor on the book 'Alopecia' by InTechOpen publishers, guest Editor of *Plastic and Aesthetic Research Journal* on minimally invasive cosmetic surgery, Editor/Advisory Board Member of Cambridge Scholars Publishing, UK and *Austin Plastic Surgery*, open access journal by Austin Publishing Group, USA.

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