Platelet Rich Plasma: Is it Effective in Treatment of Atrophic Scar?

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Abstract:

ABSTRACT Introduction: Atrophic scar is the result of decrease collagen production and matrix formation, that's why management of atrophic scar is challenging for plastic surgeons. PRP plays an important role in tissue regeneration during wound healing via release of growth factors that have an important role in the regulation and proliferation of mesenchymal and fibroblast cells, hence it increase collagen production and improve wound healing. The main goal of the article is to evaluate the efficacy and safety of autologous platelet-rich plasma (PRP) injections in improvement of atrophic scar. Patients and Methods: Twenty patients with atrophic scar were included in this study at plastic surgery department, Assiut university hospital, in duration from July 2016 to February 2017. Mean age was 22.68±6.75 years. Patients were randomly divided into 2 groups to allow equal distribution. Group 1 (control), underwent scar revision only. Group 2 (study), underwent scar revision, followed by immediately intradermal autologous Platelet rich plasma (PRP) injection at the edges of the wound. This was followed by PRP injection every month for the next five months. Patients with atrophic non pigmented scars at any region of the body were included. Any case with history of medical co-morbidities also was excluded. Scar width, Vancouver scar scale (VSS), surgeon assessment scar scale, patient assessment scar scale and complications, were the outcome measurements. Results: Surgeon assessment scar scale, VSS, and patient assessment scar scale showed no significant difference (pvalue

Keywords:

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