



DERMATOLOGICAL SURGERY

A NOVEL TREATMENT OF ATROPHIC SCARS USING PLATELET-RICH PLASMA INJECTION AND SUBCISION

J Alassaf⁽¹⁾ - S Alwaheidi⁽¹⁾ - K Abu Rahmeh⁽²⁾ - H Odeibat⁽¹⁾ - T Maiita⁽¹⁾ - S Hashaikeh⁽¹⁾

King Hussein Medical Center, Dermatology, Amman, Jordan⁽¹⁾ - King Hussein Medical Center, Nursing, Amman, Jordan⁽²⁾

Background: Scars are a major functional, psychosocial and cosmetic concern for many patients of all skin types. Various treatment methods are available for hypertrophic and atrophic scarring. Hypertrophic scars show good response to intra-lesional steroid injection and fractional CO₂ laser resurfacing, but atrophic scars show moderate response and possible side effects to laser resurfacing and some other treatment modalities.

In this retrospective study we assessed the response of atrophic scars of different etiologies to minor surgical treatment using subcision (subcutaneous incision surgery) and platelet-rich plasma (PrP) injection.

Observation: We recruited 55 paediatric and adult patients with atrophic and depressed scarring that are either laser-naïve or failed treatment with laser, usually due to resultant post-inflammatory hyperpigmentation or poor response. All presented to King Hussein Medical Center Dermatology Clinic, in the period from July 2016 and April 2018. Ages were between 7 and 63 years. Subdermal incision (subcision) was performed and/or autologous PrP was injected superficially into the scar. Patients were assessed on a scale of 1 to 10. Some were also assessed using the Patient and Observer Scar Assessment Scale. Sessions were repeated if necessary and follow up was done monthly.

Key Message: A grade using percentage of improvement was suggested to record results. Based on the observer (1 to 10) scale before and after treatment, a classification of excellent, very good, good, and fair was utilized to correspond to 75%, 50%, 25% and 10% improvement, respectively. All of the patients had good clinical improvement. 15% of the patients had excellent improvement, 67% of them had very good improvement, and 18% had good improvement. Therefore our study has demonstrated that subcision and PrP injection is an effective, alternative, novel and safe method of treatment of atrophic scarring.

