

October 01-02, 2018
Frankfurt, GermanyClin Dermatol Res J 2018, Volume 3
DOI: 10.4172/2576-1439-C1-003

IMPROVING THE APPEARANCE OF ABNORMAL FACIAL SCARS BY AUTOMATED MICRO-NEEDLING TECHNOLOGY

Kadir Mardam Bek¹, Elias Kinj Boutros¹ and Monir Harfoosh²¹Hama University, Syria²Damascus University, Syria

Background: Scar formation is a natural part of the healing process following a physical injury to body tissues. The two most common types of scars are keloid and hypertrophic scars. These pathological scars result from an abnormal response to trauma. They can be painful and itchy leading to a considerable functional and aesthetical disability. Post-surgical scars require a complex treatment and can be very challenging for surgeons.

Purpose: To evaluate the level of general satisfaction of surgeons and patients regarding the aesthetical results following the application of the automated micro-needling technology.

Materials & Methods: The study evaluates 18 scars from 10 patients: 6 males (13 scars) and 4 females (5 scars) aged between 18 and 36. The patients were treated using the automated micro-needling technology at three stages of healing with intervals of 20 days. Using the Patient and Observer Scar Assessment Scale V2.0 (POSAS), each scar has been evaluated from the

patients' scale in terms of pain, itchiness, skin colour, hardness, thickness, shape and the state of the abnormal facial scar. The same abnormal facial scars have been evaluated by three different observers in terms of vascularity, pigmentation, thickness, relief, pliability, surface area and the overall state of the scars using the POSAS doctor's scale at four distinct stages.

Results: The findings of the study reveal statistical differences at the significance level of 5% between each session. This indicates a reduction in the scale values of the studied variables, with the exception of pigmentation, pain and itchiness, which only display slight changes.

Conclusion: The automated micro-needling technology leads to a significant improvement in the characteristics of the evaluated scars.

ghady84@yahoo.com