Improvement of Skin Quality in Scars Injected with Fat Graft; A Comparative Study.

Amr A. Mabrouk, MD; Nahed S. Boughdadi, MD; Hesham A. Helal,MD.

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INTRODUCTION: Scars usually lead to aesthetic and functional problems affecting the patient's social and psychological life. Regenerative medicine is an emerging and rapidly evolving field of research and therapy, thanks to new discoveries on stem cells. Adipose tissue contains a reserve of mesenchymal stem cells. In the present work, we study the role of autologous fat grafting in scar remodeling.

PATIENTS AND METHODS: This study included 16 patients with scars in the face and extremities. The patients were injected with fat graft under scars and a punch biopsy was taken from each patient prior to the procedure and one month after. A visual scar scale was done and two uninvolved surgeons evaluated both pre- and post-operative pictures. Follow-up of each case was done for six month. All pre- and post- operative data were statistically analyzed and compared.

RESULTS: All results of biopsy, scar scale, photographs, both patient and surgeon noticed a positive changes in skin thickness, smoothness of surface and color.

CONCLUSION: Lipofilling for scars showed a long term improvement of the general appearance of scars.

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