

Extracorporeal Shockwave Therapy for Chronic Skin Lesions

Authors:

W. Schaden, C. Köpl, A. Valentin, M. Pusch, R. Thiele*

Institution:

Trauma Center Meidling, Vienna, Austria

* Zentrum für extracorporale Stosswellentherapie, Berlin

Introduction:

Treating infected non-unions with soft tissue problems with ESWT we observed that there was also a positive effect on the skin. In most of the patients an extremely rapid healing of the wounds was observed. After successful animal trials performed at the department of plastic and reconstructive surgery of the University of Innsbruck we started our pilot trial.

Material and Methods:

Since September 2004, 102 patients with 104 chronic skin lesions were treated by means of ESWT. A special therapy head to defocus the shockwaves was constructed. All therapies were performed without any kind of anesthesia as an outpatient treatment. We used the same form of dressing after ESWT that was applied before the treatment. Depending on the surface of the defect different number of pulses were applied. The patients were treated in 1 up to 6 sessions depending to their tendency of regeneration and epithelialization.

Reason for skin lesion:

Posttraumatic 44

Venous ulcer 25

Arterial ulcer 15

Postoperative 10

Decubital Ulcer 5

Burning wounds 5

Total 104

Results:

Out of the 104 patients 77 (74%) showed complete healing, 11 (10%) had more than 50% of epithelialization and 7 (7%) had less than 50%. 9 (10%) patients were lost of follow up. The treatment was tolerated by all patients without any kind of anesthesia. No adverse effects have been observed. In none of the cases an increase of symptoms was reported. After further pilot studies evaluating the most efficient treatment parameters, prospective randomized trials have to be performed to proof safety ness and efficacy of shockwave therapy in this new medical field.