

## Effect of Extracorporeal Shock Wave Therapy on Post Burn Scars

Mahmoud S Zaghloul  
Cairo University, Egypt

**Background:** Hypertrophic scarring is a difficult problem for burn patients, and scar management is an essential aspect of outpatient burn therapy. Post burn pathologic scars involve functional and aesthetic limitations that have a dramatic influence on the patient's quality of life.

**Aim:** was to investigate the use of extracorporeal shock wave therapy (ESWT), which targets the fibroblasts in scar tissue, as an effective modality for scar treatment in burn patients.

**Subjects and methods:** forty patients with post burn scars were assigned randomly into two equal groups; their ages ranged from 20-45 years. The study group received ESWT and traditional physical therapy program (deep friction massage, stretching exercises). Control group received traditional physical therapy program (deep friction massage, stretching exercises). All groups received two sessions per week for six successful weeks. The data were collected before and after the same period of treatment for both groups. Evaluation procedures were carried out to measure scar thickness using ultrasonography and Vancouver Scar Scale (VSS) was completed before and after treatment.

**Results:** Post treatment results showed that there was a significant improvement difference in scar thickness in both groups in favor of the study group. Percentage of improvement of scar thickness in the study group was 42.55%, while it was 12.15% in the control group. There was also a significant improvement difference between results obtained using VSS in both groups in favor of the study group.

**Conclusion:** ESWT is effective in management of pathologic post burn scars.

### Biography

Mahmoud S Zaghloul is an Assistant Lecturer in the Department Physical Therapy for Surgery, Faculty of physical therapy, Cairo University, Egypt. I had my B.Sc. in physical therapy (2006) from Faculty of physical therapy, Cairo University with final grade of excellent with honor. I have attended and passed successfully the postgraduate courses as a partial fulfillment of the requirement of the Master and Ph.D. degree of very good!. My study in all above certificates was in English. I have awarded my M.Sc. degree in physicaltherapy. from the same faculty (2012). The title of my master thesis was "Effect of Low Level LASER on Post Burn Scars". And now I am working on my Ph.D. thesis.

[mahmoud.zaglol@pt.cu.edu.eg](mailto:mahmoud.zaglol@pt.cu.edu.eg)

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