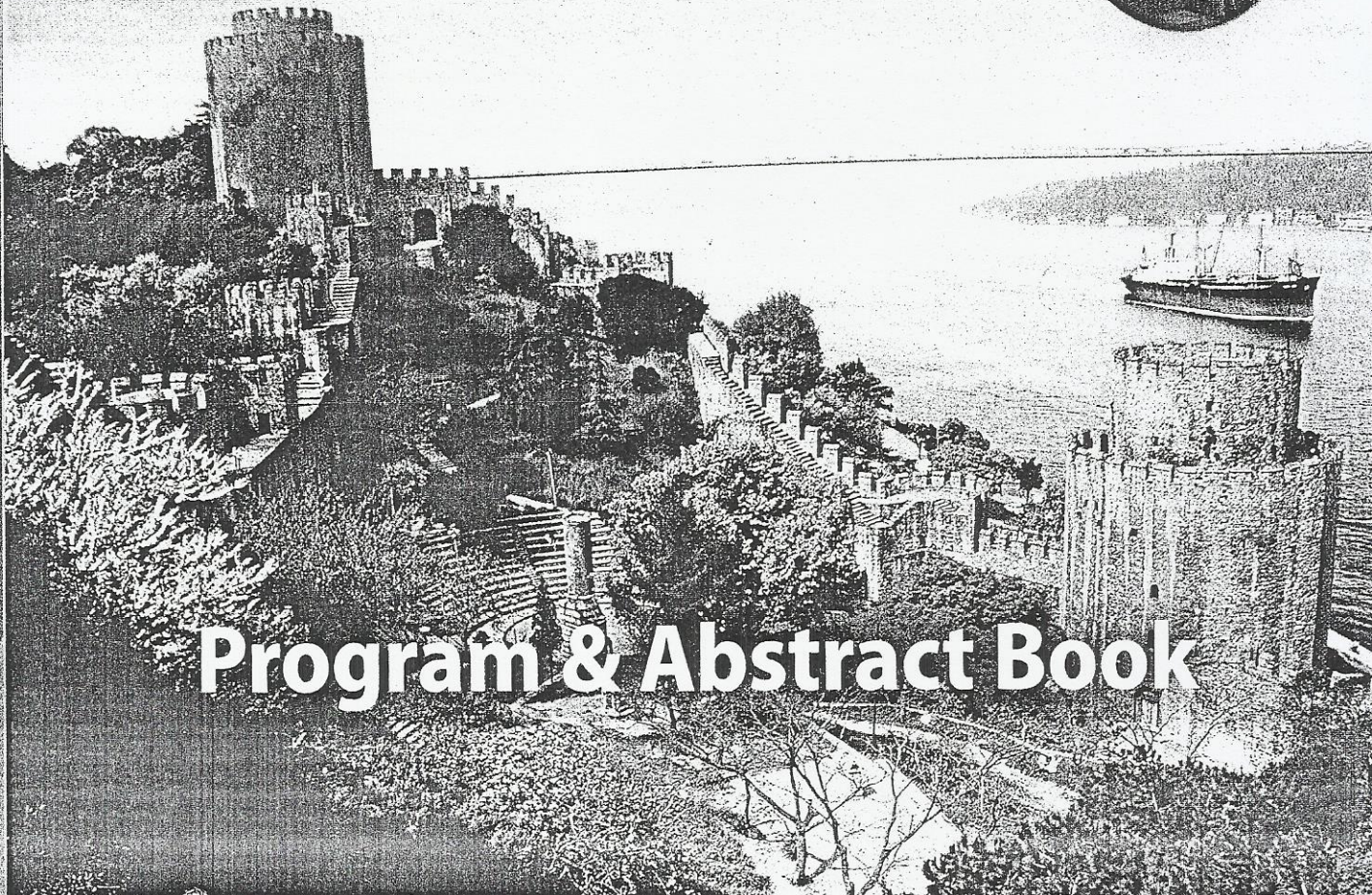
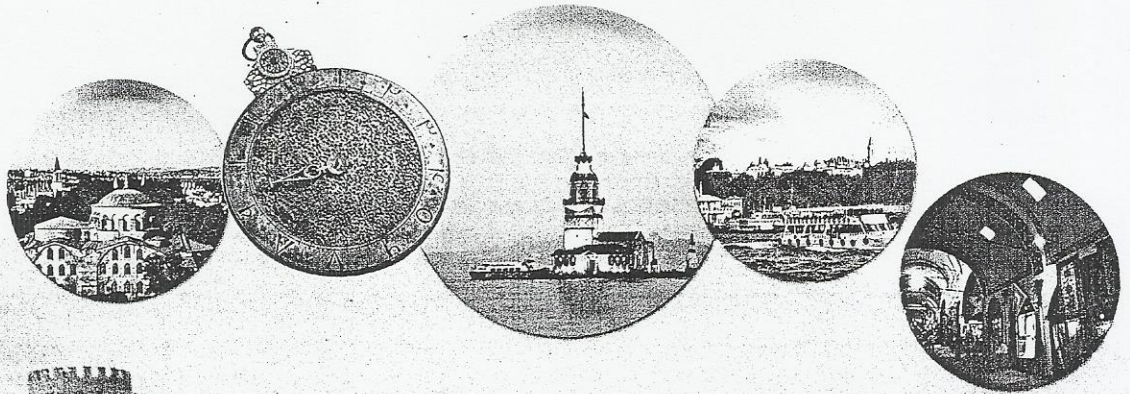




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beyond one month after injury. Our goal is to see whether PRUS[®] depressomassage has a positive effect on the recovery of cutaneous sensation.

Methods: Pression, Perception and Threshold (PPT) was examined on 18 burn patients treated with depressomassage and 9 burn patients treated with classical physiotherapy. The Semmes-Weinstein[®] aesthesiometer was used to determine PPT. Skin fold thickness was measured with a Harpenden[®] skin fold caliper. The patients were tested in the first week of the treatments, after one month and after three months. In the test group, scars were on average 20 months old; in the control group 13 months. This test is part of a larger study on the effects of PRUS[®] depressomassage on scar tissue.

Results: The results showed a significant effect of time both for PPT and skin fold thickness in the test group. A significant lower Pressure Perception Threshold was observed with 59% after one month ($p < .001$) and 54% after three months ($p < .002$). Skin fold thickness also improved significantly with 5% after one month ($p < .001$) and 16% after three months ($p < .001$). The control groups showed no significant improvement over time.

Conclusion: PRUS[®] depressomassage seems to have an immediate positive effect on Pression Perception Threshold and skin fold thickness, compared to classical physiotherapy. These findings may indicate that specialized scar therapies, such as PRUS[®] depressomassage are a preferable alternative to classical physiotherapy, when treating scars.

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A NEW APPROACH TO THE ANTECUBITAL SCAR CONTRACTURE: RHOMBOID ROTATION FLAP

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Background: Scar contracture is still one of the most complicated challenges developing after either skin damages or burns. Although splints, pressure therapy, massage, and rehabilitation have been widely used for softening of the scar later the skin injury, in some cases all methods are ineffective to avoid developing a scar contracture. Presented here is a new method for releasing antecubital contractures.

Methods: With this new method, eleven patients who had antecubital scar contracture treated successfully. In this study, we modify the well known shape of the rhomboid which is usually used in releasing burn scars as a form of incision. The rhomboid is lengthened through the axis which places between both obtuse angles, so it gains more tissue available for rotation in this axis which will be turned to the contracture line when the flap elevation and rotation are completed.

Results: There were no major complications such as infection, hematoma, flap loss, suture dehiscence or flap necrosis. All rotated flaps healed uneventfully. In all patients, contracture released completely and normal joint motion was provided, involving enough extension range of elbow without any difficulty. No recurrence of the contracture was observed in the

follow-up period.

Conclusions: When dealing with this flap for elbow contractures, good functional recovery and cosmetic appearance were obtained in eleven cases without any complication. It is a safe, simple, effective, and reliable method offering a new solution to the correction of the contractures with satisfactory results.

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THE USE OF A LOW TEMPERATURE SILICONE IMPREGNATED SPLINTING MATERIAL IN THE MANAGEMENT OF ANTERIOR NECK BURN SCAR HYPERTROPHY

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Introduction: Severe burns to the neck region are often very challenging in terms of splinting and effectively inhibiting the resultant burn scar hypertrophy and contracture. Due to the unique mobility of the neck in terms of multiple planes of motion coupled with the presence of delicate underlying structures responsible for swallowing, breathing and circulation, providing a well fitting and effective splint can be a daunting task. Additionally, when fabricating such a device, the change in patient position (i.e. upright vs. supine) can impact the fit of the device as the effects of gravity can alter body contours. As such, the clinician often needs a material that can be readily modified, can be fabricated directly on the patient and combine the therapeutic effects of pressure and silicone in one application to meet the needs of this difficult anatomical region.

Methods: Patients were treated utilizing an anterior neck splint comprised of ½ sheet of a silicone impregnated low temperature splinting material; Silon-LTS[®] (side A) and ½ sheet of plain thermoplastic splinting material (side B). The two splint sides were evaluated in terms of mold ability; ease of direct fabrication; edging/finishing; rigidity, ease of modification and comparison of scar pliability in these two treatment conditions. A scar assessment tool was utilized by both the patient and clinician to compare the neck scar appearance over side A vs. side B.

Results: Splinting management was readily enhanced with the Silon-LTS[®] material – Clinicians found the material easy to work with and easy to mold directly on the patient – which aided in the ability to modify the device more readily in the upright position. Compliance with combination therapy was enhanced and overall scar pliability was improved with the silicone impregnated thermoplastic material as indicated in both patient and clinician pre and post assessments.

Conclusions: The Silon-LTS[®] splinting material is shown to be an effective choice in the management of anterior neck scar hypertrophy. The ability of this material to be reheated for multiple adjustments and modifications without losing contour or silicone sheeting makes it a cost effective splinting alternative. This new material provides clinicians with another viable option in the treatment of burn scar contracture splinting. It may be a material of choice when the therapeutic combination of