A4. Silicon Gel Sheeting Therapy for Scar Management

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Background: Dressing therapy using silicon gel sheets has been employed for abnormal scars such as keloid and hypertrophic scars, and has been successfully used in their treatment. It causes no pain, and is convenient, safe and inexpensive. Although its action mechanism has not yet been elucidated, it has been shown to be clearly effective. There are some types of silicon gel sheets with which patients can be treated. In this paper, we report not only of a comparison of silicon gel sheets but also a comparison with pressure dressing, which we have used with gel sheets.

Methods: Three types of silicon gel sheets were used for postburn hypertrophic scar patients, and compared. Adhesive power of the sheets were: 0.19N, 0.29N and 0.61N for product A, B and C, respectively. The price of the sheets was: $0.32/cm², $0.39/cm² and $0.48/cm² for product A, B and C, respectively.

Results: All the products were effective for reducing redness and gradual elimination of scars. High adhesive power products could fit curved surfaces and mobile regions such as elbow joint. However, these products sometimes caused contact dermatitis or erosion of the skin. On the other hand, low adhesive power products did not cause skin trouble, but could not fit curved surfaces. Thus, bandage or garment was useful for supporting gel sheeting. However, there were no clear differences between them.

Conclusion: Dressing therapy using silicon gel sheets was useful for scar management of both postoperative and non-operative patients. Moreover, little ingenuity such as concomitant use of pressure dressings, was much more useful for management.