

Silicone Gel Sheeting for Treatment of Hypertrophic Scarring of the Arm for Complex Open Wound of the Arm- A Case Study:

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ABSTRACT:

Silicone gel sheeting has been used for many years now as a treatment for hypertrophic and keloid scars. This case report presents a patient who sustained a complex open wound of the upper arm and developed hypertrophic scarring and who had significant improvement with topical silicone gel sheeting.



HISTORY

This patient is a 44-year-old woman who was injured when she was attacked by her horse and sustained a complex open wound avulsion injury of her anterior medial left upper arm from a horse bite (see, Fig.1). The patient had a complete loss of skin and soft tissue down to the biceps fascia with a defect measuring 10 x 15 cm. The patient presented to the emergency room. The avulsed tissue was retrieved. The patient was taken to the operating room that day, where the avulsed tissue was surgically replanted. Unfortunately this tissue did not survive, and the patient was left with a complex wound measuring 10 x 15 cm.

The tissue was surgically debrided, and this complex open wound was allowed to granulate. The patient was returned to the operating room approximately 1 month later for her second procedure. The patient had a split thickness skin graft reconstruction of this complex open wound. The patient's split thickness skin graft healed with a 100% take, but the patient developed hypertrophic scarring, particularly around the edges of the graft (see, Fig. 2). The patient complained of discomfort and a sensation of tightness around this area of grafting. This hypertrophic scarring was treated with placement of topical silicone gel sheeting.



Fig. 1 – Day of surgery April 15, 2007 (Horse Bite)



Fig. 2 – July 9th, 2007, (almost 2 months after split thickness skin graft, hypertrophic scar)-before using NEWGEL+



Fig. 3 – August 15, 2007, after 3 weeks of using NEWGEL+ (about 3 months post skin graft)



Fig. 4 – November 20, 2007, after 4 months of using NewGel+

RESULTS:

The patient used NEWGEL+ silicone gel sheeting over the area of scarring and split thickness skin graft topically once the area of split thickness skin grafting had completely healed, beginning about four months after her original injury and about three months after her split thickness skin graft. The patient had significant improvement in her scarring with improvement in the thickness, redness and tightness of the scar with her topical scar management (see, Fig. 3). "Fig. 4 shows even more significant improvement after 4 months of using NewGel+."

CONCLUSION:

This case report describes a patient who had significant overall improvement in her hypertrophic scarring of her complex open wound of the upper arm with the use of topical silicone gel sheeting.