

Elevating Scar Care with Clinically Proven Silicone Treatment



Silicone-based scar therapy is one of the most widely studied and commonly recommended non-invasive approaches for improving the appearance and symptoms of scars, particularly hypertrophic scars and keloids. Professional-grade silicone is available as a topical gel, and is intended for use once the skin has fully closed. Its primary function is to form a protective, occlusive barrier over the scar that helps regulate moisture levels in the skin, reducing transepidermal water loss and creating a hydrated environment that supports healthier scar remodeling.¹

When it comes to how skin heals, silicone does not eliminate scars, but it meaningfully influences how scars mature over time. The resulting moist environment regulates the activity of fibroblasts, the cells responsible for producing collagen. In a healing wound, collagen overproduction leads to the formation of a raised scar. By hydrating the tissue, the silicone helps suppress the overactivity of these cells, normalizing their function.¹ Clinically, this results in measurable improvements in scar height, texture, elasticity, and color, with many patients observing flatter, softer scars and reduced redness or pigmentation when silicone is used consistently.² While early use during the remodeling phase tends to produce stronger cosmetic outcomes, studies indicate that older, mature scars may still improve with longer-term application.¹

Clinical evidence supports the use of topical silicone gels for scar prevention and management. In systematic reviews and meta-analyses of randomized controlled trials, topical silicone gels show significant improvement of scar pigmentation, height, and pliability compared to placebo or no treatment, with comparable overall efficacy with silicone sheets. These findings reinforce that adherence and consistent daily use over weeks to months are critical, as scar remodeling is a gradual biological process.³

Overall, silicone stands out in scar care management as a non-invasive, well-tolerated, and evidence-backed option for improving scar quality and patient comfort. Clinical literature consistently supports its role in reducing scar thickness, discoloration, stiffness, and associated symptoms such as itching or discomfort.⁴ Clinical findings indicate that silicone gel formulation demonstrates strong efficacy in the management of hypertrophic scars and keloids, with consistent use. Efficacy was noted in both mature and immature scars, supporting the benefit of early intervention to optimize aesthetic outcomes and patient adherence.⁵



References:

¹ Science Insights. Do Silicone Sheets Work on Old Scars?

<https://scienceinsights.org/do-silicone-sheets-work-on-old-scars/>

² Westra I, Pham HTH, Niessen FB. Topical Silicone Sheet Application in the Treatment of Hypertrophic Scars and Keloids. *Journal of Clinical and Aesthetic Dermatology*, 2016.

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³ Durante CM, Kant S. Silicone therapy for the treatment and prevention of problematic scars: a practical guideline. *Wounds International*. 2020. <https://woundsinternational.com/wp-content/uploads/2023/02/58fdb75173ea7e613e076cbdc709741.pdf>

⁴ Sebastian G, et al. Efficacy and Tolerability of a Novel Silicone Gel for Scar Treatment.

<https://vc-mimilabs.s3.amazonaws.com/files/2013-01-24-15/Sebastian.pdf>

⁵ *Journal of Wound Management and Research*. Clinical Application of Self-Adherent Scar Care Silicone Sheet and Silicone Gel in Postoperative Scar Management.

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