Treatment and management of keloids and hypertrophic scars with silicone cushions

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Keloids and hypertrophic scars are initiated by skin injury and grow over time to become protuberant lesions that can associate with pain and itching. Covering the scars with silicone products is known to improve these symptoms and reduce scar size. For example, Perkins et al. reported in 1982 that silicone gel softens hypertrophic scars and thereby promotes the ability of other conservative treatments to promote scar regression. The present abstract focuses on silicone cushions, which are composed of sealed silicone sheets containing silicone oil. Silicone cushions must be applied to the lesion as long as possible with good contact, with daily removal and cleansing of the lesion to avoid contact dermatitis. The mechanism by which silicone cushions relieve pathological scar symptoms is unclear but Hirshowitz speculated in 1993 that it relates to negative charges: when he compared various forms of silicone materials, he observed that silicone cushions provided the greatest negative charge and also had the best outcomes with pathological scars. Thus, negative charge may improve the symptoms of keloids and hypertrophic scars and promote their regression.