



Myth Busting: What Works Best for Your Scar?

J Cardey¹, Rosemary Kendell², Fiona Poelchow², Fiona Wood³

1 A/ Senior Occupational Therapist, State Adult Burns Service WA, Fiona Stanley Hospital, 112-118 Murdoch Drive, Murdoch WA 6150, ashlee.cardey@health.wa.gov.au

2 Senior Occupational Therapist, State Adult Burns Service WA, Fiona Stanley Hospital, 112-118 Murdoch Drive, Murdoch WA 6150

3 Director of State Adult Burn Service WA, Fiona Stanley Hospital, Locked Bag 100, Palmyra DC, WA 6961, fiona.wood@health.wa.gov.au

As Occupational Therapists working in the State Adult Burns Unit of Western Australia, a substantial part of our role involves providing comprehensive education on scarring and evidence-based interventions that optimise scar outcomes for our patients. One of the challenges we face is that our patients are often present with 'inherited', incorrect and often conflicting information from various sources on how to best manage a scar. Patients will willingly purchase and 'try anything' at the recommendation of a friend, family member or even advertisement when it is not necessarily supported by research evidence and its long-term impact on the final scar outcome is potentially unknown. This means that Occupational Therapists then need to refute this information in order to effectively educate our patients and guide them towards best practice for desired outcomes.

The State Adult Burns Unit at Fiona Stanley Hospital is committed to evidence-based practice, and as such, our scar management protocol includes:

1. Completing scar massage twice per day

Patients are advised to complete firm, circular massage whilst applying enough pressure to make the skin blanch. *Regular sessions of scar massage have been found to help improve itch, reduce scar thickness and results in a decrease in erythema (Choo et al, 2014).*

2. The recommendation to moisturise (and massage) the skin using sorbolene

After a burn injury, skin can appear dry and pruritus is a common symptom experienced by patients. *Moisturising is a common and widely accepted intervention for skin care and scar management post a burn injury (Klotz et al, 2017).* We recommend sorbolene. *"There are many moisturising products available, but a simple water-based sorbolene cream is very efficacious and cost-effective" (Hyland et al, 2015).*

3. The use of compressions garments

If a patient has a high risk of developing a scar or required surgery to manage their burn injury, patients will be measured for and fitted with compression garments. We recommend wearing garments for twenty-three hours per day. *Compression therapy can aid in a decrease in erythema and results in significant reduction of scar thickness and firmness (Anthonissen et al, 2016).*

4. The use of silicone therapy

"Of the non-invasive options, silicone sheets and silicone gels are universally considered as the gold standard in scar management and the only non-invasive preventive and therapeutic measure for which there is enough supporting data..." (Monstrey et al, 2014). Occupational Therapists within the Burns Unit regularly provide silicones in its various forms according to what is most appropriate for the patient. We often use silicone and compression therapy combined. *"Pressure and silicone therapy are the most popular and evidence-based conservative treatments of hypertrophic scar formation after a burn" (Anthonissen et al, 2016).*

Although the aim is to provide the 'gold standard' in scar management as outlined above, it can be difficult to challenge patient's preconceptions and often the education we provide is new and potentially opposing information. To better understand the products and treatments that patients and members of the community would often use, including where they obtained information from an informal survey was conducted amongst patients and family members attending the outpatient clinic on a given day. Participants were asked four questions:

- Once your burn has healed is there any product or treatment you would use to improve the scar?
- Where did you hear about this product?
- If a scar was causing you problems who would you ask for help or information?
- What do you think is the best way to manage a scar?

Of the survey participants

- **5%** of survey participants identified silicone based products as an appropriate treatment to improve scarring. Other products commonly identified were Bio-Oil, Vitamin E creams and oils, aloe-vera or a non-specific moisturiser.
- **57%** of patients reported they had heard about this product from a friend and family member who had used it before. **7%** of patients reported using Google to find information.
- Patients identified a variety of people they would seek advice from including friends, family, their General Practitioner and a dermatologist. One patient who has had previous experience with burn injuries identified an occupational therapist.
- To manage a scar **60%** reported that the patient would 'rub oil into the scar' and **35%** of patients were 'unsure'.

These results confirmed the anecdotal observations and experiences of the Occupational Therapy team.

In an attempt to expose patients to an evidence-based approach to scar management, and to 'plant the seed' that remedies suggested by media or family friends may be ineffective, this poster was designed for the Outpatient Clinic Waiting Room and for the 'Visitors' Room on the Burns Unit.

It is designed as a visually engaging, accurate and simple education tool to address three goals

1. Dispute some of the commonly believed myths regarding scar management
2. Reinforce education provided by the Occupational Therapy team in clinic appointments
3. Direct patients to seek information from appropriate sources
4. Encourage patients to seek advice early so that provided intervention will have maximum affect

This poster is currently being trialled in the Outpatient Clinic and Inpatient Ward in the State Adult Burns Unit of Western Australia.



Are you worried about a scar?

- Have you seen and believed an ad for a product that says it will fix a scar?
- Has a friend suggested an expensive cream but you found it didn't make a difference?
- Have you asked Doctor Google?

🕒 Please, save your time and effort.
Ask an occupational therapist, as we know what works best.

The Occupational Therapists in the burns unit specialise in treating scarring and we know how to get results. We are often asked about the many lotions and potions out there that claim to improve a scar, but please don't be fooled!



- | | | | | |
|---|---|--|---|--|
| <p>"Scar Oils"</p> <p>Often scar oils have a very small effect on a scar, it is the massage as you rub them into the skin that makes the difference.</p> | <p>Oil based moisturisers and "scar creams"</p> <p>Oil based moisturisers can be too rich for your skin; they easily clog pores and cause pimples.</p> | <p>Herbal Oils</p> <p>Newly healed skin is very sensitive, just like a baby's! Oils that have a small can cause skin reactions and damage the new skin.</p> | <p>Aloe Vera</p> <p>When used in large amounts aloe vera can actually dry out your skin, having the opposite effect. Dry skin can cause cracking and new wounds.</p> | <p>Vitamin E oils or creams with petroleum</p> <p>Creams with Vitamin E are no better than those creams without. Creams with vitamin E or petroleum will damage pressure garments if you need to wear them.</p> |
|---|---|--|---|--|

What do we recommend?

1. **Massage**
Massage helps to remodel scarring that can form from a burn injury. It also helps to reduce sensitivity.
Tip: Massage twice a day, pressing hard enough to make the skin go white.
2. **Sorbolene**
Plain sorbolene works very well. It is cheap, not oily and has nothing harmful added to it.
Tip: You can get big tubs of Sorbolene from your local supermarket for a low price.
3. **Silicones**
Silicones work to soften and smooth scarring. We use and provide many different types here in the burns unit.
Tip: Not all scars need silicone. If you are worried about a scar and think silicone may help please ask to speak to one of our Occupational Therapists.
4. **Pressure garments**
Pressure garments are used after someone has had surgery for a burn. They work to flatten and smooth a scar.
Tip: Pressure garments are most effective when worn 23 hours a day. If you require a pressure garment you will be seen by an Occupational Therapist.

If there is any product you'd like to try that you think may be helpful, please ask to speak with an Occupational Therapist.

References

- Klotz, T, Munn, Z, Aromataris, E, Greenwood, J 2017, 'The effect of moisturisers or creams on scars: a systematic review protocol', *JBI Database of Systematic Reviews and Implementation Reports*, Vol. 15, No. 1, pp 15-19
- Hyland, E, Connolly, S, Fox, J, Harvey, J 2015, 'Minor burn management: potions and lotions', *Australian Prescriber*, Vol. 38, No. 4, pp 124-127
- Soo Cho, Y, Hyun Jeon, J, Hong, A, Tae Tang, H, Yin, H, Suk Cho, Y, Kim, D, Hur, J, Hyun Kim, J, Kim, W, Chai Lee, B, Hoon Seo, C 2014, 'The effect of burn rehabilitation massage therapy on hypertrophic scar after burn: a randomized control trial', *Burns*, Vol. 40, pp 1513-1520
- Anthonissen, M, Daly, D, Janssens, T, Van den Kerckhove, E 2016, 'The effects of conservative treatments on burn scars: A systematic review', *Burns*, Vol. 42, pp S08-S18.
- Monstrey, S, Middelkoop, E, Jeroen Vranckx, J, Bassetto, F, Ziegler, U, Meunier, S, Teot, L 2014, 'Updated Scar Management Practical Guidelines: Non-invasive and Invasive Measures', *Journal of Plastic, Reconstructive and Aesthetic Surgery*, Vol. 67, pp 1017-1025

