Silicone Gel in the Treatment of Keloids

Sir,

We were interested to see the results of Juhlin's recent study in which he found that a hydrocolloid occlusive dressing, combined with various potent corticosteroids, was useful in the management of psoriasis and other dermatoses (1). There has been growing interest in the use of occlusive dressings in the treatment of a variety of dermatological conditions (2, 3, 4) including hypertrophic scarring (5, 6).

We have assessed the potential benefit of silicone gel sheeting (Silastic Gel Sheeting, Dow Corning Q7-9119) in the management of keloids, as currently the treatment of this problem is less than satisfactory, in terms of both efficacy and adverse effects. Informed, consenting patients recruited from the Skin Department applied the gel sheeting to their keloid(s) for 24 hours per day, removing it only for bathing, at which

Fig. 1. Keloids prior to (A) and after (B) treatment with silicone gel and clobetasol propionate 0.05% (Dermovate) ointment.

Table I. *Demographic data, keloid characteristics, associated symptoms and clinical responses*

Patient race/sex/age (years)	Cause	Site	Keloid duration (years)	Associated symptoms	Effect of treatment	Length of treatment (months)
Caucasian F 60	Surgery	Abdomen	15	Itching	Itching markedly relieved Markedly flatter	3
Caucasian M 27	Unknown	Chest	0.5	Tenderness	Tenderness fully relieved Markedly flatter and paler	2
Negroid M 20	Trauma	Back	4		Slightly flatter	1
	Trauma	Chest	3		Markedly flatter	2
Negroid M 23	Insect bite	Chest	6	Itching	Itching fully relieved Slightly flatter	3
Negroid F 30	Surgery	Abdomen	1	Itching Tenderness	Itching fully relieved Tenderness markedly relieved Markedly flatter	3
Caucasian M 23	Acne vulgaris	Shoulder	4		Slightly flatter and paler	3
Caucasian F 15	Chickenpox	Lower back	0.5		Markedly flatter and paler	2
	Chickenpox	Upper back	0.5		Slightly flatter and paler	2

time the gel was changed. Each sheet was cut to a size slightly larger than the keloid itself and held in place with Micropore tape (3M Health Care Ltd.). Patients were reviewed at monthly intervals for up to 3 months. Nine keloids in 7 patients were evaluated and the results are shown in Table I. Initial evidence of benefit was usually observed at the first clinical assessment after one month. Patients found the gel comfortable and easy to use.

We found it quite striking that all patients experienced some benefit, but felt that efficacy would be improved by the concomitant use of a potent topical corticosteroid. Thus, when faced with a distressed female patient, aged 24 years, who had keloid formation of 8 months' duration on her right lower forearm caused by attempting to remove long-standing tattoos with an unidentified acid, the following management was instituted. Clobetasol propionate 0.05% (Dermovate) ointment was applied under silicone gel occlusion daily, using the method described above. Significant improvement in itching, tenderness, colour, texture and thickness was noted at the first review after 3 weeks. The excellent results achieved 3 months after commencing treatment are shown in Fig. 1.

In view of our results, we propose that further work with silicone gel, with or without concomitant corticosteroid application, is warranted. Such treatment may be particularly useful early in keloid development, especially in patients known to be at risk of this problem.

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