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Current Clinician Opinions on the Management of Hypertrophic and Keloid Scars with Pressure Modulation

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Current Burn Clinician Opinions on the Management of Hypertrophic and Keloid Scars with Pressure Modulation.¹

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Burn Clinicians (specifically Occupational Therapists, Physiotherapists and Specialist Nurses) have long been involved in the determining the most appropriate intervention to manage hypertrophic and keloid scars. Pressure Garments have been the mainstay in the therapist's choice in treatment options since the early 1970's and continues to be the standard therapy and first line treatment for almost all aspects of problem hypertrophic scarring and burn injury. Silicones have also been used since the early 1990's and continue to be a useful mechanism in the effective management of problem scars and a prominent choice among all clinical disciplines to manage scars. Advancements in both the manufacturing and technology industries have been able to provide clinicians with unique combinations of garment materials with a silicone bonded textile as well as specific gradient pressure garments that accommodate the unique needs of the patient in order to achieve an optimum aesthetic and functional outcome. These advancements have also provided more durable and long lasting treatment options to manage patients' scars. However, a review of the most common treatment interventions and consensus among clinicians preference was lacking in the literature.

A brief questionnaire was piloted in 2007 among two Occupational Therapists within UK Plastics / Burns units to determine the most current trends in the choices of hypertrophic and keloid scar management for burns and a subsequent mail survey was conducted among 69 identified Regional Plastics / Burns Units in the UK and a response rate of 65% was attained. Of that group of designated scar management professionals, 96% reported that they used some type of silicone sheeting and 93% reported using pressure garments to treat hypertrophic burn scars.

The data finding supports the hypothesis that the most common option in the management of hypertrophic and keloid scars used by today's clinicians employs combination therapy (98%) involving an adjunct in the form of silicone sheeting and pressure. This group also reported that almost half (44%) observed that patient compliance increased substantially with the use of pressure garments incorporating silicone textile. This use of combination therapy (Silon-TEX[®]) directly incorporated into the garment essentially eliminates many of the current difficulties associated with topical silicone gel sheets used under garments alone such as material loss, material not staying put on articulating joints and digits, and the material requiring multiple replacements prior to the replacement of the garment during a specified treatment cycle (averaging 4-6 sheets or upwards of 9-12 tubes of material per 3 month garment wear). Overall, these results demonstrate that combination therapy with a silicone textile (Silon-TEX[®]) incorporated into a garment is both economically advantageous and clinically effective.

¹[abstract] In: Proceedings of the 41st British Burns Association 2008; April. 23-25, Bristol, United Kingdom, p. 9

Current Clinician Opinions on the Management of Hypertrophic and Keloid Scars with Pressure Modulation

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Introduction

Specialist Cliniciums (specificarly Occupational Therapiels, Physiotherapiels and Specialist Narawa) have leng been involved in the determining the most appropriate and current interventions to manage hyperhophic and kolod scars. Presours Conversit, have the one the maintainty is the therapiels, choice in Instanent options since the early 1970's and continues to be the standard therapy and final line treatment for almost all appects of problem hypertrophic acarmag and turn mpay. Skicose have also been used ance the with 1980's and continue to be a useful methanism in the offective management of problem scars and a prominent choice among all clinical docipates to remage scars.

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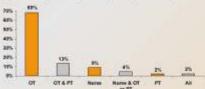
Demographics

Table 1:	Population Survey	69
	Survey Size	45
	Response Rate	65%
	Surveys Not Included (4 x received out of time scale, 2 x insufficient data)	
Table 2	Burns & Plastics Departments	35
	Out Patient Clinic	
	Burns Unit	25
Tabie 3:	National Centres	12
	Regional Centres	13
	Satulite Units	18
	Private Hospitale	2

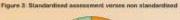
Figure 1: Geographical representation of survey respondents

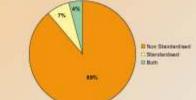


Figure 2: Disciplines responsible for providing scar management



Not surprisingly, 100% of all the christians polied reported using some form of scar management to twait their patients scars and of this group, more their ¹⁵g reported assessing, their patients acars utilising a non-standard measure of scar assessment to document progress and efficacy of triteriention - most commany a clinical measure report and / or photographic (Fig 3).





From the group of designated scar management protessionals, 90% resorted that they used score type of silicone sheeting and 90% reported sing pressure germents to treat protect accerning. This was followed by topical silicone gai, silicone shattmere, pedding and allicone brosted twitle (Fg 4).

Cincui effectiveness with these particular treatment motables shows the best subcomes are achieved with silicone get sheet and pressure gamments with ull cincipate monthly two guided this threatment motable. The use of allocne today meet moterial (Silich TEX) is pressure gamments was margined at 55%, however more full of the Criceans (SHN) could not comment as they had not used if then discut treatment or were unaware of it. (Fig.5).

Figure 4: The primary scar treatment modal/ties used by cliniciana

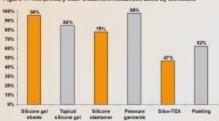
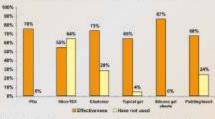


Figure 5: Clinical effectiveness with different treatment modulities



Jobekin Ltd was the most commonly used provider of custom made pressum gammade at these sumspiration units provider, aff which of the gamments provided, fattowed by 10% MHS heaptal trusts handling their own in-house production (Fig. 6). Clinicians reported lakening commonial manufactures for querty of gamment, service providen and disabolity of gamment. Of the hospitals producing 'In-House' who returned a survey reported their massins were trased upon their belief in cost effectiveness and convenience. Of the other actar management modather utiliand, Tutaging and trainer Care is the most operation of the shell treatment option. Clinician choose based in solecting a modify anishable product to allow immediate commissionement of restrict (Fig.7).

Figure 6: Favoured manufacturer of pressure garment

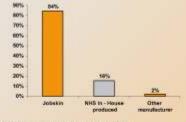


Figure 7: Other scar modalities used by clinicians

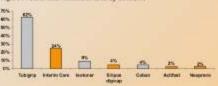


Figure 8: Overall clinical treatment opinions on combination therapy for

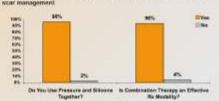
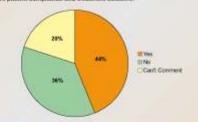


Figure 9: Do Silicone betile inserts incorporated into pressure garments improve patient compliance and treatment outcome?



Conclusions

The data findings support the hypothesis that the most common option in the management of hypothesis and leadst acars used by bolay's divicions employs combination therapy (18%) involving an adjunct in the form of allocene sheeing and pressure gammatic. Networking to note that leads than half of the clinicians polied used a silicone textile insert (47%) in their pressure gammatis to achieve their optimal combination therapy treatment (Fig. 8). However, this group also reported that almost half (14%) observed that patient compliance increased with the use of pressure gammatis (roorporating silicone textile in comparison to other combination treatments (Fig. 8).

This use of combination therapy directly incorporated into the garment essentially eliminates many of the current difficulties associated with topical elicities get effects used under garments such as loss of the material, material not staying put on articulating joints and digits, and the material requiring multiple replacements prior to the replacement of the garment during a specified treatment cycle (swerging 4-6 sheets or speards of 9-12 tables of material treatment water).

Specific follow up will be undertaken with the preinvinary data at a select sampling of 3 three centres over a 12 month period examining the inspect of the technological advancements in the treatment of hyperhophic and select scena writiging the centrication temps:

Further investigation is warranted to advance standardise treatment options for problem scarring and to examine the impact of combination therapy employing pressure garments with allocore évolves on patient compliance and scar management efficacy.

Relevants			
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