

# CASE REPORT

# Treatment of post-burn hypertrophic scar with homoeopathic medicine

Bhopal Singh Arya, V. A. Siddiqui<sup>1</sup>, Rupali P. Dixit<sup>1</sup>

# Access this article online Website: www.ijrh.org DOI: 10.4103/0974-7168.116634 Quick Response Code:

### **ABSTRACT**

Hypertrophic scar (HSc) is a dermal fibro proliferative disorder that occurs following trauma, inflammation, surgery, burns, and sometimes spontaneously. This is a case report of a 23 year old male with post-burn HSc after acid burn injury on his left jaw. The homoeopathic medicine *Silicea* was prescribed in 30<sup>th</sup> potency on the basis of the totality of symptoms followed by repertorization; though only three doses of *Silicea* were prescribed at baseline during the course of treatment followed by placebo, there was a marked improvement in HSc as well as in associated complaints.

Keywords: Burn scar, Hypertrophic scar, Homoeopathy, Silicea

Homoeopathic Treatment Center, Safdarjung Hospital, ¹Central Council for Research in Homoeopathy, Headquarters, New Delhi, India

Address for correspondence:
Dr. V.A. Siddiqui,
Scientist-4, Central Council for
Research in Homoeopathy, Hqrs,
New Delhi, India.
E-mail: vasiddiqui55@gmail.com

**Received:** 26-04-2013 **Accepted:** 26-07-2013

# **INTRODUCTION**

Annually about two million people suffer from various modes of burn injuries worldwide, of whom more than a lakh die. In India, about 60,000 people suffer from burns annually, more than 50,000 are treated in hospitals, and about 10,000 succumb to thermal injury. Every year, a substantial proportion of deaths in India occur due to burn injuries. Prolonged morbidity as well as temporary and permanent disability due to burns results in a heavy economic loss. Scarring secondary to burns leads to a multitude of adverse medical consequences including loss of function, restriction of joint mobility, restriction of growth, altered appearance, and adverse psychological effects.<sup>[1]</sup>

HSc scarring after burns remains a major problem and is considered to be common. Although hypertrophic scarring commonly occurs following burns, many aspects such as incidence of and optimal treatment for scar hypertrophy remain unclear. Pressure garments are commonly used as treatment even though there is little sound data that they reduce the prevalence or magnitude of the scarring.

Homoeopathic like medicines Arnica Staphysagria have demonstrated a significant role in wound healing and cicatrization process, concluded in a recent animal model study.[4] As per the literature available, it is seen that homoeopathic medicines had positive effects on scar resolution but the scientific studies for showing its effectiveness are rarely found. A case report of post-burn HSc is presented here with a positive effect of the homoeopathic medicine Silicea in reducing the HSc. This case is an attempt to document the usefulness of homoeopathic treatment in post-burn scars. An increasing number of such cases will create an adequate database to enable a well-designed research study in this area.

# **CASE REPORT**

A young male of 23 years of age, an unmarried cloth merchant, suffered from acid burn on the left side of the face and left shoulder seven months previously when walking on the road. It was 4.5% burn as per the past reports of the Burn Department of Safdarjung Hospital, New Delhi. He was treated by

# Arya, et al.: Post burn hypertrophic scar

allopathy with minimal improvement. Subsequently, he developed HSc on the left jaw since one month. He consulted at the outpatient department of the Homoeopathic Treatment Centre, Safdarjung Hospital, New Delhi. Presenting complaints were HSc post-burn scar since one month on the left jaw with severe itching, worsening at night and during perspiration. Pain was of a stitching type along with marked redness of the region [Figure 1].

The patient had a history of pneumonia in childhood and was treated with conventional medicines. Family history revealed nothing except filariasis in his mother. The patient was thin and tall in appearance with decreased thirst and appetite. He was habitually constipated with constant desire for defaecation. During physical and systemic examination, nothing abnormal was found. He lacked confidence in his work. When angry, he threw things. He sweated profusely during the daytime specially in morning leaving white stains on his cloths; he had disturbed sleep till midnight. In general, heat aggravated the patient's symptoms.

The Vancouver Scar Scale (VSS)<sup>[5]</sup>, an internationally accepted scale for assessing scars, was used during pre and post-treatment assessment of HSc in this case. VSS [Table 1] consists of four variables: Vascularity, height (thickness), pliability, and pigmentation. In this case report, "Patient's VSS"- was used for the assessment of symptom of Itching. Each variable has four to six possible scores. The total score ranges from 0 to 16, where score 0 reflects normal skin. VSS score of this patient was 13 at baseline on October 23, 2010 and this reduced to 2 on February 4, 2011 during three months of follow-up with seven visits [Table 1].



Figure 1: Before the treatment

Selection of medicine was based on totality of symptoms of the patient and the final medicine was selected after repertorization in consultation with homoeopathic materia medica. Three doses of *Silicea* 30 were prescribed the first day followed by placebo twice a day for 15 days before the first follow-up. Placebo was continued, as improvement continued after the first follow-up. The following rubrics were selected for repertorization (chart is attached in Table 2):

MIND - ANGER - violent
MIND - CONFIDENCE - want of self-confidence
STOMACH - THIRSTLESS
STOMACH - APPETITE - diminished
RECTUM - CONSTIPATION - constant desire
PERSPIRATION - PROFUSE - morning
PERSPIRATION - STAINING the linen
PERSPIRATION - ODOUR - offensive
SLEEP - SLEEPLESSNESS - night - midnight - before
SKIN - CICATRICES-painful-stitching
SKIN - ITCHING - night
SKIN - ITCHING - perspiration - agg.

### **RESULTS**

The patient was followed up on every 15<sup>th</sup> day and the VSS score was filled after observation of the scar and measurement of its height. The score reduced from 13 to 2 in three months of follow-up and showed 84.6% improvement (marked improvement) in the scar [Figure 2]. Follow-up schedule is shown in Table 1 as per the VSS score. This result shows the usefulness of the homoeopathic medicine *Silicea* in HSc. Redness, itching, and height of scar are reduced as shown post treatment [Figure 2] after the prescription of *Silicea* compared to the pretreatment stage [Figure 1].

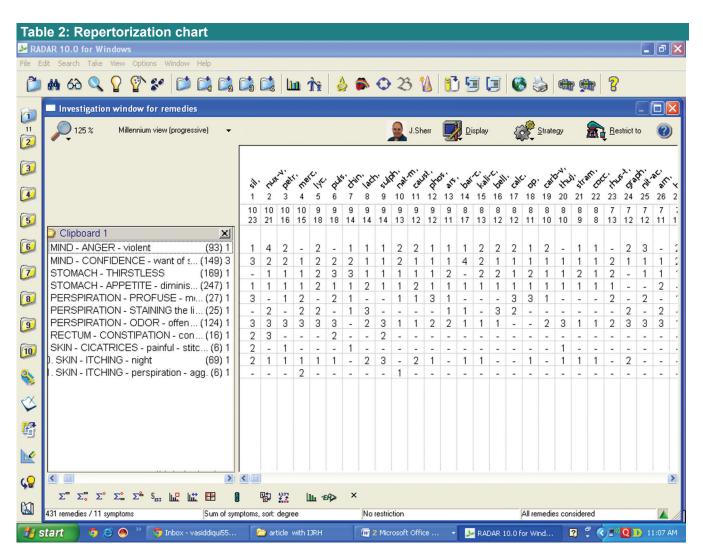


Figure 2: After the treatment

Arya, et al.: Post burn hypertrophic scar

Table 1: Follow-up chart as per vancouver scar scale								
Sign/ Symptoms	Score at entry 23-10-10	Score at follow up visits						
		2 <sup>nd</sup> visit 5-11-10	3 <sup>rd</sup> visit 20-11-10	4 <sup>th</sup> visit 5-12-10	5 <sup>th</sup> visit 15-12-10	6 <sup>th</sup> visit 30-12-10	7 <sup>th</sup> visit 4-1-11	8 <sup>th</sup> visit 15-1-11
Pigmentation	Mixed 2	Mixed 2	Mixed 2	Hypopigmentation 1	Hypopigmentation 1	Hypopigmentation 1	Normal 0	Normal 0
Height	2-5 mm 2	2-5 mm 2	2-5 mm 2	2-5 mm 2	<2 mm 1	<2 mm 1	Flat 0	Flat 0
Pliability	Ropes 4	Firm 3	Yielding 2	Yielding 2	Yielding 2	Supple 1	Supple 1	Supple 1
Vascularity	Red 2	Red 2	Red 2	Red 2	Pink 1	Pink 1	Normal 0	Normal 0
Patient's VSS Itchy sensation	Severe 3	Severe 3	Occasional itching 2	Occasional itching 2	Occasional itching 2	Sometimes itching 1	Sometimes itching 1	Sometimes itching
Total score	13	12	10	9	7	5	2	2
Treatment schedule	Silicea 30 3 doses×1 day; placebo BD×15 days	Improvement started; placebo continued	Placebo BD*×15 days	Placebo BD×15 days	Placebo BD×15 days	Placebo BD×15 days	Placebo BD×15 days	Placebo BD×15 days

<sup>\*</sup>BD: Twice daily, VSS: Vancouver Scar Scale



Arya, et al.: Post burn hypertrophic scar

### **DISCUSSION AND CONCLUSION**

It is known that *Arnica* is a useful remedy in injuries and in after effects of injuries. In the literature on burn cases, the usefulness of homoeopathic medicines like *Cantharis* and *Aconite* is found. [6] One of the studies conducted to see the effects of *Cantharis* as an analgesic in 34 cases of minor burn found that *Cantharis* was effective in alleviating pain. [7]

Strong evidence of homoeopathic treatment for HSc burn scar is not found in the literature, except in one article by Dr. Foubister, *Homoeopathy and Scar Tissue*, <sup>[8]</sup> where he discusses his experience and the comments of stalwarts in such cases. In homoeopathic materia medica, medicines like *Graphites*, *Silicea*, *Nitric acid* and so on are described for use in scar dissolution. <sup>[6]</sup>

In this case report, the patient showed improvement after the homoeopathic medicine not only in the scar but also in other associated complaints; stools became satisfactory, appetite and sleeping pattern improved, and so on. Only three doses of *Silicea* 30 were prescribed at baseline during the whole period of treatment. Pigmentation, height, vascularity, pliability, and itching of HSc improved markedly with the homoeopathic medicine.

In the conventional system, silicone gel or sheath are used for the treatment of HSc;<sup>[9]</sup> coincidentally, in this case, potentized Silicea was prescribed on the basis of the totality of symptoms with marked improvement. It is interesting to know that the silica as a substance is useful in HSc scar treatment in a crude form like gel as well as in homoeopathic potency. However, phases of scar evolution can be protracted, and a tremendous range exists between the time that a scar becomes hypertrophic in the first few months to the time that it completely resolves with little or no treatment.[10] In this case report also, we cannot exclude the chances of spontaneous resolution of scar or resolution due to delayed response to allopathic treatment. Though the homoeopathic treatment has shown favourable results in this case,

in the future, randomized controlled trials with larger sample size are required for validation of the effects of the homoeopathic treatment.

### **ACKNOWLEDGMENTS**

The authors express their heartfelt gratitude to the former Director General Prof. (Dr.) C. Nayak and the present Director General of the Central Council for Research in Homoeopathy (CCRH), Dr. R. K. Manchanda for their continued guidance and encouragement. They also gratefully acknowledge the patient who co-operated wholeheartedly during the treatment.

### **REFERENCES**

- Meenakshi J, Jayaraman V, Ramakrishnan KM, Babu M. Keloid and hypertrophic scar: A review. Indian J Plast Surg 2005;38:175-9.
- Bloemen MC, van der Veer WM, Ulrich MM, van Zuijlen PP, Niessen FB, Middelkoop E. Prevention and curative management of hypertrophic scar formation. Burns 2009;35:463-75.
- Bombaro KM, Engrav LH, Carrougher GJ, Wiechman SA, Faucher L, Costa BA, et al. What is the prevalence of hypertrophic scarring following burns? Burns 2003;29:299-302.
- Alecu A, Alecu M, Mărcus G. Effect of thehomoeopathic remedies Arnica montana and Staphysagria on the time of healing of surgical wounds. Cultura Homeopática 2007;20:19-21.
- Draaijers LJ, Tempelman FR, Botman YA, Tuinebreijer WE, Middelkoop E, Kreis RW, et al. The patient and observer scar assessment scale: A reliable and feasible tool for scar evaluation. Plast Reconstr Surg 2004;113:1960-5.
- Boericke W. Pocket Manual of Homoeopathic Materia medica and repertory. Rep. ed. New Delhi: B Jain Publishers; 1998.
- Leaman AM, Gorman D. Cantharis in the early treatment of minor burns. Arch Emerg Med 1989;6:259-61.
- Foubister DM. Homoeopathy and scar tissue observations on the influence of certain potentized substance on scar tissue. Br Homoeopath J 1975; 60-64.
- Van den Kerckhove E, Stappaerts K, Boeckx W, Van den Hof B, Monstrey S, Van der Kelen A, et al. Silicones in the rehabilitation of burns: A review and overview. Burns 2001;27:205-14.
- Atiyeh BS. Nonsurgical management of hypertrophic scars: Evidance-based therapies, standard practices, and emerging methods. Aesthetic Plast Surg 2007;31:468-92.

**How to cite this article**: Arya BS, Siddiqui VA, Dixit RP. Treatment of post-burn hypertrophic scar with homoeopathic medicine. Indian J Res Homoeopathy 2013;7(2):91-4.

**Source of Support**: Central Council for Research in Homoeopathy, **Conflict of Interest:** None declared.

सारांशः अति पोषणज व्रणचिह्न (एच एससी) एक त्वचीय तंतु प्रचुरोद्भवी विकृति है, जो अभिघात, सूजन, शल्य चिकित्सा, जलने के पश्चात् और कभी—कभी स्वतः ही हो जाती है। यह 23 वर्ष के एक ऐसे आदमी की केस रिपोर्ट है, जिसे उसके बाएं जबड़े पर एसिड से जलने से हुई क्षिति के पश्चात् एच एससी हो गए थे। संग्रह द्वारा अनुवर्तित संलक्षणों की समग्रता के आधार पर 30 की पोटेंसी में होम्योपैथिक औषध सीलिसिया दी गई। हालांकि, प्लासिबो के बाद के दौरान बेसलाइन पर सीलिसिया की केवल तीन खुराक दी गई थीं परंत् एच एस सी में और इससे जुड़ी शिकायतों में अच्छा खासा सुधार पाया गया।