



Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in

An International Journal for Researches in Ayurveda and Allied Sciences







Journal of **Ayurveda and Integrated Medical Sciences**

> ORIGINAL ARTICLE March 2023

Clinical Evaluation of MINISCAR Cream

Nitin Berde

M.D. (AYU.), Regn. No. I-23403-A-1, Dhanvantari Clinic, Shop No 1, Sai Om D, Louis Wadi, Thane (w), Mumbai, Maharashtra, India.

ABSTRACT

Background: Scars are areas of fibrous tissue that replace normal skin tissue after injury. In Ayurveda several medicines claimed to be beneficial for removing, rather reducing the scar is available. **Objective:** This clinical study is aimed to evaluate the effects of MINISCAR cream manufactured by Charak Pharma Pvt. Ltd. on skin scars. Method: 60 patients both male female between 18-50 years suffering from scar markings were included in trial. All patients were advised to apply MINISCAR cream once in a day for 30 days. Analysis was done on the basis of pre and post study photograph of the affected area taken along with the date and patient name. Results: There were 44 females and 16 male patients. In 24 patients of acne scar, 54% patients showed significant improvement. In 20 patients of stretch marks, almost 50% patients showed significant improvement. In 6 patients of hypertrophic scars, 66% patients showed significant improvement. While no significant improvement was observed in 2 patients of contracture scar and 8 patients of Keloid scar. Conclusion: Overall with MINISCAR cream almost 45% patient improved exceptionally well, which is certainly a very good outcome. A detailed clinical trial needs to be conducted further to verify the outcomes of the trial.

Key words: Clinical research; Scar prevention; Herbal extract; Hypertrophic scarring; Drug delivery; Transdermal delivery; Skin; Acne scar, Keloid scar

INTRODUCTION

A scar is a natural part of the healing process. Skin scars occur when the deep, thick layer of skin (the dermis) is damaged. The worse the damage is, the worse the scar will be. Scars are areas of fibrous tissue that replace normal skin (or other tissue) after injury. A scar results from the biologic process of wound repair in the skin and other tissues of the body. Thus, scarring is a natural part of the healing process. With the exception of very minor lesions, every wound (e.g., after accident,

Address for correspondence:

Dr. Nitin Berde

M.D. (AYU.), Regn. No. I-23403-A-1, Dhanvantari Clinic, Shop No 1, Sai Om D, Louis Wadi, Thane (w), Mumbai, Maharashtra, India.

E-mail: dr.vinayak@charak.com

Submission Date: 05/01/2022 Accepted Date: 16/02/2023

Access this article online **Quick Response Code** Website: www.jaims.in DOI: 10.21760/jaims.8.3.3 disease, or surgery) results in some degree of scarring.^[1]

Transforming Growth Factors (TGF) play a critical role in scar development and current research is investigating the manipulation of these TGFs for drug development to prevent scarring from the emergency (and rather inappropriate) adult wound healing process.^[2]

Abnormal scars

Two types of scars are the result of the body overproducing collagen, which causes the scar to be raised above the surrounding skin.

Hypertrophic scars take the form of a red raised lump on the skin, but do not grow beyond the boundaries of the original wound, and they often improve in appearance after a few years. Keloid scars are a more serious form of scarring, because they can carry on growing indefinitely into a large, tumorous (although benign) growth.^[3]

No scar can ever be completely removed. They will always leave a trace, but their appearance can be

ORIGINAL ARTICLE

March 2023

improved by a number of means, currently various measures such as Laser surgery & resurfacing, Steroid injections, Pressure garments, Radiotherapy are suggested.^[4]

In Ayurveda especially Sushruta has written a special chapter on wound healing (Vrana) where he has suggested several medicines to eradicate the scars. Taking clue from the same, many ayurvedic formulations are available, in market, claimed to be beneficial for removing, rather reducing the scar. We have conducted a clinical study in our clinic on 60 patients to evaluate the effects of MINISCAR cream manufactured by Charak Pharma.

Formulation of MINISCAR is as follows.

- Kumari Gel (Aloe barbadensis) 150 mg 1.
- 2. Pashanbheda (Bergenia ligulata) 100 mg
- 3. Shwet Sariva (Hemidesmus indicus) 100 mg
- 4. Lodhra (Symplocos racemosa) 100 mg
- Haritaki (Terminalia chebula) 50 mg 5.
- Babbula (Acacia arabica) 50 mg 6.

MATERIALS AND METHODS

Subjects: 60 patients male / female between 18-50 years suffering from scar markings

Investigator: Dr. Nitin Berde, M.D. (Ayurveda)

Study Site: Dhanvantari Clinic, Shop No 1, Sai Om Dham, Louis Wadi, Thane (W.)

Inclusion Criteria

- 1. Scar < 3 Years
- 2. Male / Female
- 3. Age less than 50 years
- 4. Stretch marks (Due to striae gravidarum & Weight gain)
- 5. Scar from minor burns, Injury and acne

Exclusion Criteria

- Scar > 3 years 1
- 2. Tuberculosis

- 3. Scar associated with fresh inflammatory changes
- 4. Henson's disease

Study Design

- All included patients were subjected to written consent.
- Systemic clinical examination was done to rule out any underlying disorder.
- All patients were advised to apply Miniscar cream once in a day for 30 days.
- All the records were entered in the prescribed format of Case record form.
- A pre-study photograph of the affected area was taken to keep the same in record along with the date and patient name.
- After 1-month, similar photographs were taken again, for comparing the same with previous.
- Care has been taken to maintain the photo position, similar in both cases. Analysis is done on the basis of comparison of them

OBSERVATION AND RESULTS

Sex wise division of patients



Out of 60 participants, Female were 44 and Male were 16

ORIGINAL ARTICLE

March 2023

Age wise distribution

Scar wise distribution



Less than 20 yrs : 5 subjects, 20-25 yrs: 20 subjects, 25-30 yrs : 26 subjects, 30-35 years: 7 subjects, 35< yrs : 2 subjects. Average age of the participant was 29+/-11.51 yrs. There were no dropouts.



Keloid scars: 8 subjects, Contracture scars: 2 subjects, Hypertrophic scars: 6 subjects, Acne Scars: 24 subjects, Stretch marks: 20 subjects.

Study Result

Hypertrophic scars



Out of 6 patients, 2 patients showed mild improvement, 3 patients showed moderate improvement while patients showed 1 no improvement.

Acne scar



Out of 24 patients, 10 patients showed mild improvement, 12 patients showed moderate improvement, showed excellent 1 patient improvement while 1 patient showed no improvement.

ORIGINAL ARTICLE

March 2023

Stretch marks



Out of 20 patients, 8 patients showed mild improvement, 6 patients showed moderate improvement, 4 patients excellent showed improvement while 2 patients showed no improvement.

Overall results



Out of 60 patients, 22 patients showed mild improvement, 22 patients showed moderate improvement, 5 patients showed excellent improvement while 11 patients showed no improvement.

DISCUSSION

The word scar was derived from the Greek word eschara, meaning place of fire. Scars -whether they're caused by accidents or by surgery- are unpredictable. Skin scars occur when the deep, thick layer of skin is damaged. Scars are areas of fibrous tissue that replace normal skin after injury. The way a scar develops depends as much on how the body heals as it does on the original injury or on the surgeon's skills.

A scar results from the biologic process of wound repair in the skin and other tissues of the body. With the exception of very minor lesions, every wound results in some degree of scarring. Many variables can affect the severity of scarring, including the size and depth of the wound, the blood supply to the area, the thickness and color of your skin, and the direction of the scar. How much the appearance of a scar bothers to the patients is, of course, a personal matter.

Scars form differently based on the location of the injury on the body and the age of the person who was injured. To mend the damage, the body has to lay down new collagen fibres (a naturally occurring protein which is produced by the body). This process results in a fortuna scar. Because the body cannot re-build the tissue exactly as it was, the new scar tissue will have a different texture and quality than the surrounding normal tissue. An injury does not become a scar until the wound has completely healed.

Most skin scars are flat, pale and leave a trace of the original injury which caused them. Scars form differently based on the location of the injury on the body and the age of the person who was injured. To mend the damage, the body has to lay down new collagen fibres. Because the body cannot re-build the tissue exactly as it was, the new scar tissue will have a different texture and quality than the surrounding normal tissue. An injury does not become a scar until the wound has completely healed.

CONCLUSION

Many variables can affect the severity of scarring, including the size and depth of the wound, the blood supply to the area, the thickness and color of your skin, and the direction of the scar. In Hypertrophic scars, almost 66% patients showed significant improvement. In Acne scar, almost 54% patients showed significant improvement. In Stretch marks, almost 50% patients

ORIGINAL ARTICLE March 2023

showed significant improvement. Overall, with Miniscar almost 45% patient improved exceptionally well, which is certainly a very good outcome.

REFERENCES

- Skin scarring, A Bayat, D A McGrouther, M W J Ferguson, BMJ 2003; 326 Published 11 January 2003, BMJ 2003;326:88.
- Skin repair and scar formation: the central role of TGFβ, Steven R. Beanes, Catherine Dang, Chia Soo and Kang Ting, Published online by Cambridge University Press: 13 February 2004.
- Differences in collagen architecture between keloid, hypertrophic scar, normotrophic scar, and normal skin: An objective histopathological analysis, Pauline D. H. M. Verhaegen, MD; Paul P. M. van Zuijlen, MD, PhD; Noor

M. Pennings, MD; Jan van Marle, PhD; Frank B. Niessen, MD, PhD; Chantal M. A. M. van der Horst, MD, PhD, Esther Middelkoop, PhD. Wound Repair and Regeneration, Volume 17, Issue 5, September/October 2009.

 Scar Treatment Variations by Skin Type; Marty O. Visscher, PhD, J. Kevin Bailey, MD, David B. Hom, MD; Facial Plastic Surgery Clinic, Volume 22, Issue 3, P453-462, August 2014.

How to cite this article: Nitin Berde. Clinical Evaluation of MINISCAR Cream. J Ayurveda Integr Med Sci 2023;03:19-23.

http://dx.doi.org/10.21760/jaims.8.3.3

Source of Support: Nil, Conflict of Interest: None declared.

Copyright © 2023 The Author(s); Published by Maharshi Charaka Ayurveda Organization, Vijayapur (Regd). This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by-nc-sa/4.0), which permits unrestricted use, distribution, and perform the work and make derivative works based on it only for non-commercial purposes, provided the original work is properly cited.