

INTERNATIONAL AYURVEDIC MEDICAL JOURNAL



Research Article

ISSN: 2320-5091

Impact Factor: 6.719

PHARMACEUTICO-ANALYTICAL AND CLINICAL STUDY ON SHIGRU- JEERAKA LEPA WITH REFERENCE TO KADARA (CORN)

Nagarashmi¹, K. N. Rajashekhar², SubramanyaPadyana³

1. Third-year BAMS, Alva's Ayurveda Medical College and hospital, Vidyagiri, Moodbidre

2. Professor, Department of *Shareerakriya*, Alva's Ayurveda Medical College and hospital, Vidyagiri, Moodubidire

3. Director, ATMA research center, Alva's Ayurveda Medical College and hospital, Vidyagiri, Moodubidire.

Corresponding Author: <u>drsp28@gmail.com</u>

https://doi.org/10.46607/iamj1311072023

(Published Online: July 2023)

Open Access © International Ayurvedic Medical Journal, India 2023 Article Received: 10/06/2023 - Peer Reviewed: 18/06/2023 - Accepted for Publication: 12/07/2023.

Check for updates

ABSTRACT

Kadara (Corn) is a common problem in the people of rural areas. The incidence rate of corn on the feet has been reported to be ranging from 14% to 48%. Folklore people are using locally available drugs for the management of corn effectively. *Shigru-Jeeraka Lepa* is one of the folklore preparation used in the management of Kadara (corn). But the scientific studies were not done yet. Hence this study was undertaken to evaluate the efficacy of *Shigru-Jeerakalepa* on kadara clinically. The results are encouraging.

Keywords: Kadara (corn), Shigru-Jeerakalepa, Clinical study.

INTRODUCTION

Ayurveda is a science of healthy living that deals with the physical, mental, social, & spiritual Well being of the humans

Mankind suffers from a lot of conditions which, on the outlook seem very trivial In comparison to the actual suffering arising out of the condition¹. *Kadara* is one such Condition, which comes under the umbrella of *Kshudrarogas*². It is a condition with a Simple pathology but causes intense suffering to the patient³.

Kadara can be correlated to Helomas or foot corns⁴. Foot corns have a simple etiopathology but most often, difficult to attain a complete ^{cur5e}. Various treatment Modalities available presently for the management of corn include the use of salicylic Acid paints, cryosurgery, surgical removal of corn, etc. Recurrence is a common issue In almost all the said modalities⁶.

In classical literatures, many formulations containing herbal drugs are mentioned for the Management of Kadara. Shigru-Jeeraka lepa is one among them, which is not found to Be verified scientifically to date. Shigru is a widely grown tree botanically identified as Moringa oleifera belonging to the Moringaceae family and Jeeraka is botanically identified As Cuminum cyminum belonging to Apiaceae family⁷. There is limited knowledge regarding it's medicinal utility but it is easily available and costeffective due to the inconvenience of usage of Shigru and Jeeraka there is a need for pharmaceutical Modification of these drugs for better enhancement of shelf life and exceptibility⁸. With this intension, the study has been undertaken to prepare a Shigru-Jeeraka lepa in Kadara (corn)

Objectives :

- 1. To evaluate the effect of *Shigru*, *Jeerika*, and *Ghruta* as a combination in *Kadara*.
- 2. 2. Analytical study of *Shigru Jeerika* and *Ghruta* as a Combination

Materials and Method :

The study was divided into three sections.

- Drug preparation
- Analytical study of the drug

Method:

The rats will be randomly selected and grouped as follows:-

• Experimental study Acute dermal toxicity on Wistar	
Albino rats	

Clinical study

DRUG PREPARATION⁹

• Identification and collection of drugs

• The drugs required for the preparation of *Shigru Jeerakalepa* were collected from its natural habitat

Ingredients required:

- 1. Bark of Shigru tree
- 2. Fruit of Jeeraka
- 3. *Ghruta* ghee

Pharmaceutical preparation:

The preparation of *Shigru Jeerakalepa* was done under the expert guidance at *Rasa Shashtra and Bhaishajya kalpana* lab of Alva's Ayurveda Medical college, Moodabidre

PREPARATION OF SHIGRU JEERAKA LEPA:

• *Twak* of *Shigru* and fruits of *Jeeraka* are obtained from the authentic source And cleaned

• Bark of Shigru is chopped and reduced in size

- Take Shigru, Jeeraka and ghee in a pan
- Now fry the mixture in low flame till the mixture turns slight black
- Allow for self-cooling

• Now triturate the mixture properly till it attains the *Kalka* form

ACUTE DERMAL TOXICITY

Inclusion criteria:

- A) Healthy rats of either sex
- B) weighing about 200-300g

Exclusion criteria:

- A) Infected, pregnant, and diseased rats.
- B) Rats are under trail for other experiments.

The fuis will be fundering selected und grouped us follows.			
SL.no	Group name	No. of animals	Days
Group 1	Control (PBS saline)	3	10
Group 2	Shigru Jeerakalepa	3	10

The procedure followed for dermal toxicity study:

- Fur of animals was removed in the paravertebral region.
- Shigru Jeerakalepa -1gms was applied once a day.

ASSESSMENT CRITERIA:

Dermal toxicity study- any visible changes on the skin, eyes, behavior, and food intake Was noted.



No visible changes were observed on the skin surface. There was no irregularity in The food intake and activities of the animals.

Photograph showing the animal exposed to dermal toxicity.

ANALYTICAL STUDY: ORGANOLEPTIC TEST

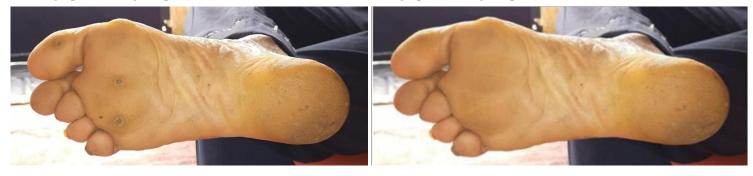
Color: Green Odor: Roasted Tamarind Texture: Coarse paste

pH	Spreadability (in cm)	Loss of Drying (in %)
13.8	1 (Highly viscous)	75.9

CLINICAL STUDY:

A total of 20 patients were recruited in our study. Photograph showing the patient's sole before treatment

Photograph showing the patient's sole after treatment.



Results

Table 1: Table showing descriptive statistics of corn treated by Shigru Jeerakalepa on 20 patients.

Treatment	Mean	Std. Dev	Std Error
Before treatment	2.450	0.510	0.114
After treatment	1.550	0.605	0.283

Graph 1: Mean Corn Grading

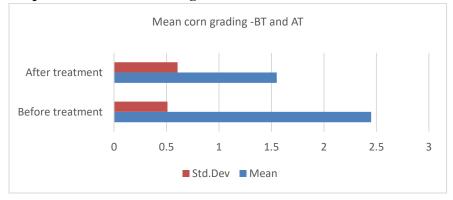


Table 2: Statistical analysis within the group using Wilcoxon Signed Rank Test

Group	Median	W-Value	P Value	Significant
BT	2.00	-120.00	< 0.001	Yes
AT	1.50			

CONCLUSION

- It is found safe for application through dermal toxicity Study
- It gives better results in KADARA (corn)
- Hence study concludes that *Shigru Jeeraka Lepa* is very effective in *KADARA* (corns)

ACKNOWLEDGEMENT:

The authors are thankful to Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore, for providing encouragement by sanctioning the grant. The authors are also grateful to the Principal, Chief Scientific Officer, ATMA Research Centre, Animal House, and Department of *Bhaishajya Kalpana and Rasashastra* of Alva's Ayurveda medical college, Moodbidri.

REFERENCES

- Burns T, Neil Cox SB, Griffiths C, editors. 7th ed. Vol. 2. UK: Published by Blackwell; 2004. Rook's Text Book of Dermatology. Ch 22.
- https://www.nhs.uk/conditions/corns-andcallus-

es/#:~:text=Corns%20and%20calluses%20are%20caus ed,not%20wearing%20socks%20with%20shoes

- https://niimh.nic.in/ebooks/e-Nighantu/bhavaprakashanighantu/?mod=read
- 4. Acharya YT, editor. Varanasi: Chaukhamba Sanskrit Sansthan; 2009. Sushruta Samhita of Acharya Sushruta Nidana Sthana Reprint Edition. Ch. 13, Ver. 30-31; p. 322. 824.
- https://www.easyayurveda.com/2012/12/06/moringabenefits-medicinal-usage-complete-ayurvedadetails/amp/
- 6. Sharangadhara Samhita of Acharya Sharangadhara, Varanasi: Chaukhambha Sanskrit Pratishthan; 2003.
- Acharya Priyavrata Sharma, Dr. Guruprasad Sharma, Kaiyadeva Nighantu, Pathyapathyavibodhaka, Oushadhavarga, Varanasi, Chaukhamba Orientalia; 2006;
- 8. https://iloveghee.com/blogs/announcements/fertilighee%E2%84%A2-the-ghee-to-put-the-oooohm-inwomb#:~:text=A%20Ghrita%20is%20made%20by,the %20system%20AND%20more%20profound.
- https://www.ijacare.in/index.php/ijacare/article/view/96 #:~:text=In%20Ayurveda%2C%20Agnikarma%20refer s%20to,pressure%20and%20repeated%20minor%20tra uma.

Source of Support: Nil Conflict of Interest: None Declared

How to cite this URL: Nagarashmiet al: Pharmaceuticoanalytical and clinical study on shigru- jeeraka lepa with reference to kadara (corn). International Ayurvedic Medical Journal {online} 2023 {cited July 2023} Available from: http://www.iamj.in/posts/images/upload/1574_1577.pdf