



REVIEW ARTICLE

A critical review on *Gandhakadya malahara*

KC Leena¹, VK Sanila^{2*}, TM Noble³, Ravi P Arya⁴, P Neethu⁴, Pillai Rekhasree⁴, R Nair Reshma⁴, PP Rinsha⁴, P Sandeep⁴ & MS Varada⁴

¹Professor, Dept. of Rasashastra and Bhaishajya Kalpana, Govt. Ayurveda college Pariyaram, Kannur

²Associate Professor, Dept. of Rasashastra and Bhaishajya Kalpana, Govt. Ayurveda College Pariyaram, Kannur

³Assistant Professor, Dept. of Rasashastra and Bhaishajya Kalpana, Govt. Ayurveda college Pariyaram, Kannur

⁴II Yr PG Scholar, Dept. of Rasashastra and Bhaishajya Kalpana, Govt. Ayurveda college Pariyaram, Kannur

*Email: sanilavkdr@gmail.com

ARTICLE HISTORY

Received: 10 June 2022

Accepted: 05 July 2022

Available online

Version 1.0 : 15 August 2022

Version 2.0 : 07 March 2023

Version 3.0 : 30 May 2023

Keywords

Malahara Kalpanas, Gandhakadhya Malahara, Pama, dadru, sidhma

Additional information

Peer review: Publisher thanks Sectional Editor and the other anonymous reviewers for their contribution to the peer review of this work.

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CITE THIS ARTICLE



Leena K C, Sanila V K, Noble T M, Arya R P. A critical review on *Gandhakadya malahara*. Kerala Journal of Ayurveda. 2022; 1(1): 49–53.

<https://doi.org/10.55718/kja.82>

Abstract

Malahara is a potent pharmaceutical preparation for external application (*Bahya Kalpana*) which has *Siktha Taila* (mixture of sesame oil and bee-wax), *Sathadhoutha Ghrita*, *Ghrita* (ghee) as the base. It is an ointment preparation which includes herbal and mineral contents depending upon the usage. *Malahara kalpanas* are very much useful in skin disorders. *Malahara* has properties like *snehana* (unctuousness), *ropana* (healing), *lekhana* (scrapping) and *varnya* (colouring) depending upon the drugs used in the preparation. A number of *Malahara Kalpanas* have been mentioned in *Rastarangini*. *Gandhakadhya Malahara* is one among them mentioned in *Gandhaka Vijnanam Tarangam*. It is a herbo-mineral formulation comprises of *Siktha taila* (mixture of sesame oil and beeswax) as a base and *Shudha Gandhaka* (Purified Sulphur), *Shudha Girisindura* (Purified Mercuric Oxide), *Shudha Tankana* (Purified borax) are as other ingredients. *Gandhakadhya malahara* is intended for external application in various dermatological problems. It is specially indicated for severe *Pama* (a type of skin condition) as per *Rasatarangini*.

Introduction

Bhaishajya Kalpana is the pharmaceutical branch of Ayurveda, which deals in detail about the preparation of different medicinal formulations. *Kalpana* is the process or the method employed in the preparation of pharmaceutical products. There are many *kalpanas* mentioned in Ayurveda and is mainly classified into *aushadha* and *ahara Kalpana*. *Aushadha Kalpana* can be again classified into primary *kalpanas* (*swarasa, kalka, etc.*) and secondary *Kalpana* (*sandhana, Sneha kalpana, etc.*). According to use, it can be classified into *Bahya Kalpana* and *Abhyantara Kalpana* (external and internal formulation). *Malahara* is a unique *kalpana* which is one among *Bahiparimarjana chikitsa* (external applications). There are no references found regarding *Malahara Kalpana* available in ancient literatures of Ayurveda. Basically, being originated from Unani system of medicine, it has found a place in the books of Ayurveda from 15th century AD. The word '*Malahara*' was adopted by *Yogaratanakara* from the word '*Malham*' originated by Unani system of medicine^[1].

Malaharas are prepared by adding bases like *Siktha*, *Sarjarasa* etc. to the *Sneha* and mixed well to get the desired consistency, smoothness and softness. The word *Malahara* means that it removes Vitiated products from *Vrana* (ulcer), *Vidradi* (abscess), *Twak Vikara* (skin disorders) etc. It is a quite widely used ointment preparation with many advantages. *Gandhakadhya Malahara* is one among them which is mentioned in *Rasatarangini*, *Gandhaka Vijaniya Taranga*^[2] and it is a Herbo-mineral formulation intended for external application in various dermatological problems.

Materials and Methods

Various ayurvedic texts reviewed for this study are *Yogaratanagara*, *Rasatarangini*, *Rasaratna samuchaya*. Apart from this, relevant books, articles from various journals and website have also been used for it. The collected materials are orderly tabulated and critically reviewed.

Pharmaceutical study

Ingredients

1. *Siktha tailam*^[3] - 6 tola (72g)

Table 1. Ingredients and properties

S.no	Drug	Rasa	Guna	Virya	Vipaka	Karma	Rogaghната	Action
1.	<i>Shudha Gandhaka</i>	<i>Katu</i>	<i>Sara, Snigdha</i>	<i>Ushna</i>	<i>Madhura</i>	<i>Kapha Vata hara, Pittajananam, dipana, pachana, amahara, balya, visha hara, athirasayana</i> ⁴	<i>Kandu, kushta, visarpa, dadru, krimi hara</i>	Antifungal, antimicrobial
2.	<i>Shudha giris-indoora</i>	<i>Katu, tikta</i>	<i>Guru, snigdha, mridu</i> ⁵	<i>Ushna</i>	<i>Katu</i>	<i>Tridosahara, lekhana, chakshushya, krimighna, kandughna, twak dosha-hara, ropana.</i>	<i>Kandu, pama, vicharchika, sidhma, visarpa, visha hara.</i>	
3.	<i>Shudha tankana</i>	<i>Katu</i>	<i>Ruksha, tikshna, sara</i> ⁶	<i>Ushna</i>	<i>Katu</i>	<i>Kapha-vata hara, pittakaram, hridaya, dipana, stree pushpa janana, balyam, mooda garbha pravartaka</i>	<i>vata vikara nashana, vividha vrana nashana,</i>	Antifungal, antiviral, antibacterial.
4.	<i>Karpoora</i>	<i>Tikta, katu, madhura</i> ⁷	<i>Laghu</i>	<i>Ushna Sheeta</i>		<i>Kaphahara, pachan, hridaya, vrishya, chakshushya, vishaghna, madakaari.</i>	<i>Avrana Shukla, mutraghata, swasa, sadyovrana.</i>	Anti-inflammatory
5.	<i>Siktha</i>	<i>Katu, tikta, Kashaya</i>	<i>Ruksha,</i>	<i>Ushna (Sheeta in Kai . Ni)</i>		<i>Vatarakta hara.</i>	<i>Vrana shodhana ropana, sphota, vipadika hara, twak pra-</i>	Antimicrobial
6.	<i>Tila taila</i>		<i>Vyavayi, teekshna</i> ⁸			<i>Kaphakrit, Sookshma,</i>	<i>Samkarath sarva-roga jith</i>	Antioxidant, anti-inflammatory.

2. *Shudha Gandhaka* (Purified Sulphur) – ½ tola (6g)
3. *Shudha Girisindura* (Purified HgO) – ½ tola (6g)
4. *Shudha Tankana* (Purified Borax) – 2 masha (2g)
5. *Karpura* (Camphor) – 2 masha (2g)

Method of preparation

1. Preparation of siktha taila³

Siktha (bee wax) – 1 part (12 g)

Tila taila (sesame oil) – 5 parts (60 g)

5 parts of *tila taila* is taken in a clean stainless-steel vessel and heated. To this 1part of scraped *siktha* (bee wax) is added and allowed to melt completely. Thus, *siktha taila* is prepared.

2. Preparation of Gandhakadhya malahara²

Siktha taila is taken in a clean stainless-steel vessel, placed over mild fire. When it liquefies, the vessel is taken out of fire and poured in a clean porcelain mortar and is added with fine powders of all the remaining ingredients one by one and stirred homogenously. When it cools down itself, the mixture attains the consistency of *malahara*. It is later



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8

Fig 1- Sikkham, Fig 2- Tila taila, Fig 3- Sudha Gandhakam, Fig 4- Sudha Girisindooram, Fig 5- Sudha Tankanam, Fig 6- Karpooora, Fig 7- Gandhakadhyamalahara Fig 8 - Gandakadi Malahara

stored in suitable wide mouthed clean dry airtight container for further therapeutic use.

Therapeutic uses

As per Rasa Tarangini Gandhaka vijnaneeyam tarangam daily application of Gandhakadhyamalahara cures severe pama roga. Studies show that it is highly effective in dadru, padadari, kushta³.

Research works

1. Antimicrobial activity of *Gandhakadhyamalahara* in vitro study.⁹

Gandhakadhyamalahara is mentioned in *Rasatarangini*, with combination of five ingredients. Identification, collection of the drugs and preparation of *Gandhakadhyamalahara* was done as per the classical reference.

Analytical study results showed as followed:

- P-Anisidine value - 8.497 mEq/kg
- Peroxide value -5.55 mEq/kg
- Viscosity Index = 1.18
- pH is 6.45
- fatty matter - 19.6.

In the antimicrobial study that was carried out to evaluate the antimicrobial activity of *Gandhakadhyamalahara* was found effective in *Proteus mirabilis* and *Propionibacterium acne*. By the virtue of the property of the ingredient as *Twak Vikaras (Kushta, Pama, Sidma, Kandu etc.) Gandhakadhyamalahara* is known to act as Antimicrobial.

2. Effect of *Gandhakadhyamalahara* on *Padadari*: a case study¹⁰

Application of *Gandhakadhyamalahara* on OPD basis in a 44yr old male presented with *padadari* over both feet along with *vedana, kandu, rukshata, daha* for 1 month.

The clinical features were noted on 1st, 15th and 31st day and the percentage of improvement observed as follows

- Cracks-66.67%
- Pain-100%
- Dryness-66.67%
- Itching-100%
- Burning-100%

The study concluded as *Gandhakadhyamalahara* is highly effective, safe and easily available affordable treatment for *Padadari*.

3. A clinical study on the role of *Gandhaka malahara* in the management of (*Charakokta* and *Sushrutokta*) type 1 *Sidhma* and type 2 *Sidhma kushta*^[11]

The results suggested that *Gandhaka Malahara* showed significant result after treatment in *Kandu Sveta varna*, No. of Lesion, *Tanu, Rajoghristam, Tamra, Alabu pushpavata*. variables and the efficacy of the treatment was highly significant even during follow up. All the patients enrolled in the study completed the full course of treatment without any adverse reaction to drug. Hence it can be sug-

Sl. no.	Drug	Rasa	Guna	Virya	Vipaka	Karma	Rogagnata	Action
1.	Shudha Gandhaka	Katu	Sara, Snigdha	Ushna	Madhura	Kapha Vata hara, Pitta-jananam, dipana, pachana, amahara, balya, visha hara, athirasayana ⁴	Kandu, kush-ta, visarpa, dadru, krimi hara	Antifungal, antimicrobial
2.	Shudha girisindoora	Katu, tikta	Guru, snigdha, mridu ⁵	Ushna	Katu	Tridosahara, lekhana, chakshushya, krimighna, kandughna, twak dosha-hara, ropana.	Kandu, pama, vicharchika, sidhma, visarpa, visha hara.	
3.	Shudha tankana	Katu	Ruksha, tikshna, sara ⁶	Ushna	Katu	Kapha-vata hara, pittakaram, hridya, dipana, stree pushpa janana, balyam, mooda garbha pravartaka	vata vikara nashana, vividha vrana nashana,	Antifungal, antiviral, antibacterial.
4.	Karpoora	Tikta, katu, madhura ⁷	Laghu	Ushna Sheeta		Kaphahara, pachan, hridya, vrishya, chakshushya, vishaghna, madakaari.	Avrana Shukla, mutraghata, swasa, sadyovrana.	Anti-inflammatory
5.	Siktha	Katu, tikta, Kashaya	Ruksha,	Ushna (sheeta in Kai . Ni)		Vatarakta hara.	Vrana shodhana ropana, spho-ta, vipadika hara, twak prasadanam.	Antimicrobial
6.	Tila taila		Vyavayi, teekshna ⁸			Kaphakrit, Sookshma, Krimigna	Samkarath sarvarogajith	Antioxidant, anti-inflammatory.

gested that *Gandhak Malahara* can be used in the patients suffering from *Sidhma Kushta*. Overall Results proved that in *Mahakushta* the percentage of relief is more dominant than *Kshudra kushta* Drugs Shows the better result in *Kshudra* type of *sidhma kushta*.

Discussion

The content of *Gandhkadya malahara* possesses *tridosha-hara, snigdha, teekshna, ruksha, sara and ushna* properties. All the ingredients have pharmacologically antifungal, antimicrobial and antioxidant action⁹, thus it can effectively reduce infections and prevent its recurrence by improving the immunity of skin with its antioxidant property. *Shuddha Gandhaka* is antifungal and antimicrobial, it helps in detoxification and tissue repair. *Shuddha Tankana* is antifungal and antibacterial.

Studies have shown that bee wax (*siktha*) has antimicrobial action against *Staphylococcus aureus*, *Streptococcus epidermidis*, *Streptococcus pyrogens*, *Bacillus subtilis*, *Pseudomonas aeruginosa*, *Escherichia coli*.¹² It contains squalene, 10-hydroxy-trans-2-decenoic acid and flavonoids (chrysin) which provides antiseptic properties and protect the skin against pathogenic microorganisms.¹⁴

Upon topical application, the active principles of *malahara* reaches deeper tissues through *sira mukha* and *sweda vahi srotas* with its *sara and teekshna* properties. Due to *ushna, teekshna, sara* properties, it removes the obstruction in *sweda vahi srotas* and cure the disease.¹³

Conclusion

Gandhakadhyā malahara can be prepared easily. It is highly effective, affordable and safe treatment for *pama, padadari* (cracked foot). Previous studies have already established the effectiveness of *Gandhakadhyā malahara* in *padadari* and *sidhma kushta*. Further studies and documentations should be done to prove its efficacy in various skin ailments.

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