A critical review on Gandhakadhyya malahara

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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 (scraping) and varnya (colouring) depending upon the drugs used in the preparation. A number of Malahara Kalpanas have been mentioned in Rastarangini. Gandhakadhyya 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 Tanka (Purified borax) as other ingredients. Gandhakadhyya malahara is intended for external application in various dermatological problems. It is specially indicated for severe Pama (a type of skin condition) as per Rastarangini.

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 ahaara Kalpana. Aushadha Kalpana can be again classified into primary kalpanas (swarasa, maka, 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 originat-ed 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 Yogaratnakara 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 Yogaratnagara, 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

<table>
<thead>
<tr>
<th>S.no</th>
<th>Drug</th>
<th>Rasa</th>
<th>Guna</th>
<th>Virya</th>
<th>Vipaka</th>
<th>Karma</th>
<th>Rogaghnata</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shudha Gandhaka</td>
<td>Katu</td>
<td>Sara, Snigdha</td>
<td>Ushna</td>
<td>Madhura</td>
<td>Kapha Vata hara, Pittajananam, dipana, pachana, amahara, bal- ya, visha hara, athirasayana</td>
<td>Kandu, kushta, visarpa, dadru, krimi hara</td>
<td>Antifungal, antimicrobial</td>
</tr>
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<td>2</td>
<td>Shudha girisindoora</td>
<td>Katu, tikta</td>
<td>Guru, snigdha, mridu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kapha-vata hara, pittakaram, hridya, dipana, stree pushpa janana, balyam, mooda garbha pravartaka</td>
<td>Kandu, pama, vicharchika, sidhma, visarpa, visha hara.</td>
<td>Antifungal, antiviral, antibacterial</td>
</tr>
<tr>
<td>3</td>
<td>Shudha tankana</td>
<td>Katu</td>
<td>Ruksha, tikshna, sara</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphahara, pachan, hridya, virshya, chakshushya, vishaghna, madakaari.</td>
<td>Avrana Shukla, mutraghata, swasa, sadyovrana.</td>
<td>Anti-inflammatory</td>
</tr>
<tr>
<td>4</td>
<td>Karpura</td>
<td>Tikto, katu, madhura</td>
<td>Laghu</td>
<td>Ushna</td>
<td>Sheeta</td>
<td>Kaphahara, pachan, hridya, virshya, chakshushya, vishaghna, madakaari.</td>
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<td>Anti-inflammatory</td>
</tr>
<tr>
<td>6</td>
<td>Tila taila</td>
<td>Vyavayi, teekshna</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Antioxidant, anti-inflamma- torial</td>
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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 Gandhakadhya Malahara cures severe pama roga. Studies show that it is highly effective in dadru, padadari, kushta.

Research works

1. Antimicrobial activity of Gandhakadhya Malahara in vitro study.\(^9\)

Gandhakadhya Malahara is mentioned in Rasatarangini, with combination of five ingredients. Identification, collection of the drugs and preparation of Gandhakadhya Malahara 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 Gandhakadhya Malahara 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.) Gandhakadhya Malahara is known to act as Antimicrobial.

2. Effect of Gandhakadhya malahara on Padadari: a case study\(^10\)

Application of Gandhakadhya malahara 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 1\(^{st}\), 15\(^{th}\) and 31\(^{st}\) 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 Gandhakadhya malahara is highly effective, safe and easily available affordable treatment for Padadari.

3. A clinical study on the role of Gandhaka malahar 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-
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<td>Kandu, kusha, visarpa, dadru, krimi hara</td>
<td>Antifungal, antimicrobial</td>
</tr>
<tr>
<td>3.</td>
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<td>Katu</td>
<td>Ruksha, tikshna, sara&lt;sup&gt;6&lt;/sup&gt;</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kapha-vata hara, pittakaram, hridaya, dipana, stree pushpa jananana, balyam, mooda garbha pravartaka</td>
<td>vata vikara nashana, vividha vrana nashana,</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Karpoora</td>
<td>Tikta, katu, madhura&lt;sup&gt;7&lt;/sup&gt;</td>
<td>Laghu</td>
<td>Ushna</td>
<td>Sheeta</td>
<td>Kaphahara, pachan, hridaya, vrishya, chakshushya, vishagha, madakaari.</td>
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gested that *Gandhak Malahara* can be used in the patients suffering from *Sidhma Kushta*. Overall Results proved that in *Mahakustha* 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 action, 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 pyogenes*, *Bacillus subtilis*, *Pseudomonas aerugimosa*, *Escherichia coli*.

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.

**Conclusion**

*Gandhakadhya 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 *Gandhakadhya* malahara in padadari and sidhma kushta. Further studies and documentations should be done to prove its efficacy in various skin ailments.

**References**

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