Case Study

BHRINGARAJA BHAVITHA GANDHAKA KALPA IN THE MANAGEMENT OF VYANGA – A CASE STUDY

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ABSTRACT
Acquired disorders of hyperpigmentation affects individuals of all skin types. In Ayurveda, ‘Vyanga’ is a Kshudra roga and a Rakta pradoshaja vikara which mainly affects the complexion of a person by producing Niruja, Shyava varna mandalas over face. The aim of the study was to assess the effect of Bhringaraja bhavitha gandhaka kalpa in Vyanga which is the eighth Gandhaka kalpa mentioned in the eight Taranga of Rasatarangini. Variables like percentage of area involved, darkness and homogeneity were assessed before and after treatment. This paper highlights a case study of Vyanga treated with Bhringaraja bhavitha gandhaka kalpa.

KEYWORDS: Vyanga, Bhringaraja bhavitha gandhaka, Hyperpigmentation.

INTRODUCTION
Facial melanoses are a common presentation in Indian patients, causing cosmetic disfigurement with considerable psychological impact. Melasma is a common, acquired, symmetric hypermelanosis characterised by irregular light to dark brown patches commonly involving the cheeks, forehead, upper lip, nose and chin. Melasma is more common in women of child bearing age, although men also suffer from the condition and account for about 10% of the cases. It is generally found between 20 and 50 years of age. Factors associated with melasma include exposure to ultraviolet rays, genetic influences, pregnancy, thyroid autoimmunity, oral contraceptives etc; with ultraviolet light exposure and genetic factors being strongest predictors.[1] Due to rising economic affluence, the demand for treating pigmentary disorders is also increasing. Pigmentary disorders of skin being visible can lead to low self esteem and embarrassment. Therefore there is a need for addressing this condition through Ayurvedic treatment modalities to find an effective management.

In Ayurveda, ‘Vyanga’ is a Kshudra roga and a Rakta pradoshaja vikara which mainly affects the complexion of a person and having the Lakshanas like Niruja (painless), Shyava varna mandalas (brownish black patches) over face. Dosas involved in the development of Vyanga are Vata and Pitta. Nidana of vyanga is said as anger, grief, exertion etc.[2] Vitiated Dosas manifest the symptoms in skin of face.

Gandhaka, one among the Uparasas, when purified is Rasayana and effective in managing various diseases especially those affecting skin. Gandhaka kalpas are unique formulations of Gandhaka having Rogahara and Rasayana effects. The study aims at finding the effect of Bhringaraja bhavitha gandhaka kalpa in the management of Vyanga. A single case study to assess effect of Bhringaraja bhavitha gandhaka kalpa[3] is an attempt to develop Bhringaraja bhavita gandhaka kalpa as an effective drug of practice in the treatment of Vyanga. It is the eighth Gandhaka kalpa mentioned in the eighth Taranga of Rasatarangini.

Brief history of the patient

Presenting complaints
A 37 year old male, who was apparently normal 2 years back, developed blackish patches of pigmentation gradually on forehead, above eyebrows around and over nose with no associated symptoms like itching. Complaints aggravated on exposure to sun and heat. Initially he took allopathic medications but got only temporary relief, later he consulted our hospital OPD for treatment. He is an electrical worker and his job demands working near heat. He is non-diabetic and non-hypertensive and has the habit of taking spicy foods.

Clinical findings
No relevant family history was found, patient was observed to be slightly depressed with occasional outburst of anger. Lesions were blackish in colour and irregular shape, with gradual onset on forehead, above eyebrows, above and around nose. There was no other associated inflammatory conditions or itching.

Laboratory investigations
Blood routine – Normal
Thyroid function tests- Normal
Abdominal USG – Normal

**Samprapti ghataka**
- Dosha- Vata, pitta, rakta
- Dushya- Rasa, rakta, twak
- Srotus – Rasavaha, raktavaha
- Agni – Mandam
- Rogamarga- Bahyam
- Sadhyasadhyata- Sadhyam

**Samprapti**

*Nidana sevana* like Aharaja, Viharaja, Manasika (spicy foods, exposure to excess heat, grief and anger)

Vitiate Vata, Pitta, Rakta along with Rasavaha srotus and Raktavaha srotus

*Sthanasamsraya* in the *Twak* of face

*Niruja, tanu, syava varna mandalas* on forehead, above eyebrows, above and around nose

Vyanga

**Materials and methods**

**Criteria for selection of patient**

Patient presenting with the classical signs of *Vyanga* and not associated with any systemic illness like psoriasis, PCOS, SLE or any malignant melanoma.

**Method of preparation of Bhringaraja bhavitha gandhaka kalpa**

**Gandhaka sodhana** - Gandhaka shodhana done using *Koormaputa* method. 500g finely powdered Gandhaka was taken. A clean mud pot of 5 litre capacity was taken and inside was smeared with ghee; 3 litres of fresh cow’s milk was poured into the pot. Mouth of the pot was covered with a double layered cotton cora cloth and properly tied around neck. 500g of powdered *Gandhaka* was then spread over the cloth and closed with an appropriate earthen lid and the joints were sealed with multani mitti smeared cotton cloth seven times. After drying, the entire pot was kept in a *Koormaputa* pit and heat was given from above using coconut exocarps pieces which were ignited. Exocarps of 4 coconuts were used for entire process. After complete burning of all pieces, apparatus left for self cooling. On cooling, sealing was broken and purified *Gandhaka* in form of small globules were collected, washed, dried, weighed and stored. 475g *Gandhaka* was obtained.

**Bhavana of Gandhaka in bhringaraja swarasa** - Purified *Gandhaka* was subjected to *Bhavana* in freshly expressed juice of *Bhringaraja* (*Eclipta alba*) using a stone grinder. 150ml Swarasa was needed for the first *Bhavana*. After completion of second *Bhavana* was carried out with 125ml *Bhringaraja* swarasa, sufficient to soak the *Gandhaka*. On the completion of second *Bhavana*, third *Bhavana* was carried out with 125ml *Bhringaraja* swarasa and properly dried.

**Bhringaraja bhavitha gandhaka kalpa** - 750g of *clean, dried Hareetaki* was taken and finely powdered. *Gandhaka* done three *Bhavana* in *Bhringaraja* juice was first finely powdered in a mortar and then mixed little by little with equal amount of finely powdered *Hareetaki*, grinded thoroughly to get a homogenous mixture.

**Dose** - 1 *Masha* (750mg) of *Bhringaraja bhavitha gandhaka* along with 1 *Masha* (750mg) of *Hareetaki choorna* makes a single dose. Administered with *Anupana* of honey and ghee once daily in morning.

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**Fig.1 Gandhaka shodhana by Koormaputa**
Intervention schedule

Bhringaraja bhavitha gandhaka kalpa - 1.5g of Bhringaraja bhavitha gandhaka kalpa given along with 8 drops honey and 5 drops ghee as Anupana in morning before food for 60 days continuously.

Assessment criteria

Melasma Area Severity Index (MASI) which assess the percentage of total area involved, darkness and homogeneity of the lesions was used. The severity of the melasma in each of the four regions (forehead, right malar region, left malar region and chin) is assessed based on three variables:

1. Percentage of total area involved (A)
2. Darkness (D)
3. Homogeneity (H)

A numerical value assigned for corresponding percentage area involved is as follows:

- 0= no involvement
- 1= <10% involvement
- 2= 10-29% involvement
- 3= 30-49% involvement
- 4= 50-69% involvement
- 5= 70-89% involvement
- 6= 90-100 % involvement

The darkness of the melasma (D) is compared to the normal skin and graded on a scale of 0-4 as follows:

- 0= normal skin colour without evidence of hyperpigmentation
- 1= barely visible hyperpigmentation
- 2= mild hyperpigmentation
- 3= moderate hyperpigmentation
- 4= severe hyperpigmentation
Homogeneity of the hyperpigmentation is also graded on a scale of 0 to 4 as follows:
0 = normal skin colour without evidence of hyperpigmentation
1 = specks of involvement
2 = small patchy areas of involvement < 1.5 cm diameter
3 = patches of involvement > 2 cm diameter
4 = uniform skin involvement without any clear areas

To calculate the MASI score, the sum of severity grade for darkness (D) and homogeneity (H) is multiplied by the numerical value of the areas (A) involved and by the percentages of the four facial areas (10-30%).

**Total MASI score**: Forehead 0.3(D+H)A + right malar 0.3(D+H)A + left malar 0.3(D+H)A + chin 0.1(D+H)A

**Treatment given**: 1.5 g of Bhringaraja bhavitha gandhaka kalpa along with 8 drops honey and 5 drops ghee in morning half hour before food for 60 days continuously (beginning from 17/05/2017 to 15/07/2017)

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### RESULTS

<table>
<thead>
<tr>
<th>Features</th>
<th>Before treatment</th>
<th>After treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASI score</td>
<td>21.3</td>
<td>7.2</td>
</tr>
<tr>
<td>Colour of lesions</td>
<td>Black</td>
<td>Reduced</td>
</tr>
<tr>
<td>Area of lesions</td>
<td>Widely diffused</td>
<td>Reduced</td>
</tr>
<tr>
<td>General appearance</td>
<td>Ill</td>
<td>Normal</td>
</tr>
<tr>
<td>Appetite</td>
<td>Reduced</td>
<td>Normal</td>
</tr>
</tbody>
</table>

### DISCUSSION

- *Shodhita gandhaka* is Rasayana in nature and Gandhaka kalpas are unique formulations of Gandhaka having Roga samana as well as Rasayana effects. The core functions of Rasayana is said as imparting longevity, memory, intelligence, health, youthfulness, complexion and colour and providing excellence of Prabha, Varna, Swara, strength to body and senses, virility, Kanthi.[6]
- Hareetaki and Bhringaraja have Rasayana property.
- Shudha gandhaka has Kushtahara[7] effect, also sulphur is said to have an elective affinity to skin.
- Anupana honey is Tridosha samana and Ghrita is Vata pittahara, Twachya and Rasayana.[8]
- The Rasayanatwa property of Bhringaraja bhavitha gandhaka kalpa, helped in attaining the normal Varna of skin.
- The Sookshma guna of honey helped in the penetration of medicine to Sookshma srotas.[9]
- Kushtahara property of Shodhita gandhaka helped in the treatment of Vyanga, thereby reducing the area, darkness and homogeneity of lesions.
- Due to Deepana and Pachana effects of Shodhita Gandhaka,[7], appetite was improved.
Vyanga is a Kshudrakushta where psychological factors like Soka, Krodha etc. along with physical factors like Ayasa results in the vitiation of Vata along with Pitta to manifest the disease. The ingredients in the formulation are regulators of Vata, Rasayana, Kushtahara and Vayasthapana.

CONCLUSION

It can be concluded from the present study that Bhringaraja bhavitha gandhaka kalpa provided significant relief in the condition Vyanga. Along with medicine, avoiding the Nidanas and resorting to proper Pathya gives quick results. General well being and appetite improved after treatment. Thus Bhringaraja bhavitha gandhaka kalpa can be taken as an effective and safe drug of choice in the management of Vyanga.

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REFERENCES


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