EFFECT OF KRISHNA MUSALI (CURCULIGO ORCHIOIDES GEARTN) MUKHA LEPA IN VYANGA W.S.R. TO MELASMA- A CLINICAL STUDY

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ABSTRACT

Vyanga is one of the Twak Vikara, which affects the psychology of the patients in greater extent, although it is kshudraroga. It accounts for great deal of anxiety and stress which is caused mainly due to stress, sun exposure. Treatment modalities for Vyanga are usually unsatisfactory, due to its sudden exacerbation and remission. With this background the study was undertaken to study the effect of Krishna Musali Mukhalepa in Vyanga. Clinical study on Vyanga, It is a single blind clinical study consisting of 30 patients of inclusive criteria. Simple randomized sampling was carried out for this study. Krishna Musali Mukhalepa with Ghrita and Madhu, was given for external application over affected area over face, in a sufficient quantity, once daily for 30-45 minutes, up to 21 days. The parameters of study like colour of patches, number of patches, size of patches, itching and burning sensation were recorded before and after treatment. The data was analyzed by paired t test i.e. student t test. There was statistically highly significant in objective parameters, but in overall assessment 93.3% patients got improvement. Clinically there was improvement in colour of patches compared to other parameters. Krishna Mushali lepa is very effective in the management of Vyanga.

Key Words: Krishna Musali, Vyanga, Melasma, MukhaLepa
INTRODUCTION

According to Ayurveda skin is made up off seven layers they can affected by various disorders. Vyanga has been explained in Kshudraroga\(^1\) context in Ayurveda literature, which affects the second layer of skin\(^2\).

Vyanga can be correlated to Melasma, which is the most common skin manifestation in India especially during the age of 15 to 45 years. Incidence rate is about 0.025 to 6% of population. About 10-30% patients will come with skin complaint in India. Stress & hormonal changes may cause melasma, like in pregnancy, ovarian disorders; even by using drug such as hydrotoid sodium can cause melasma in both men and women \(^3\). The lesions are pale or dark brown patches of pigmentation with irregular borders, common sites are nose, cheeks, upper lips & fore head \(^4\).

In Vyanga, there is vitiation of Vata, Pitta\(^5\) and Rakta. As the drug Krishna Musali (\textit{Curculigo orchioides}) is Vata, Pittahara having Guru, Snigdha, Picchila Gunas and Madhur, Tikta Rasas, Madhur Vipak, Ushna Virya & which does Brumhana, Rasayana karmas, Sthairya & Mardhavakar and also both Ghrita and Madhu are Varnya and Vata-Pitta hara \(^6,7,8\).

Lepa\(^9\) is the one of the treatment modality for Vyanga in Samhitas and which is more effective, as it acts locally & removes Doshas. Lepa is affordable to all classes of society & which is readily available to all, so Lepa has been selected as treatment modality in the management of Vyanga.

Thus, present study was intended to know the effect of the Krishna Musali Mukha lepa with Ghrita and Madhu in Vyanga, as these are explained as capable of destroying hyper-pigmentation found on face.

OBJECTIVE:

To study the effect of Krishna Musali (\textit{Curculigo orchioides Gaertn}) Mukha Lepa in Vyanga w. s.r. Melasma.

Review on Krishna Musali

- Botanical Name - \textit{Curculigo Orchioides Geartn}
- Family- Hypoxidaceae
- Rasa- Madhura, Tikta.
- Guna- Picchila, Guru,snigdha,
- Veerya- Ushna / Sheeta
- Vipak- Madhura
- Karma- Rasayana, Brumhana, Balya,Vrushya.
- Chemical constituents- Flavones, Tannins, Alkoloids, Glycosides, Stigma sterol, Fat, starch
MATERIALS AND METHODS

Source of Data -

Patients presenting with the features of Vyanga, were selected for the clinical study from OPD and IPD of Shri Veer Pulikeshi Rural Ayurvedic Medical College, Badami, irrespective of gender, occupation, age, occupation, or number of patches over face.

Study Design:

- It is a single blind clinical study consisting of 30 patients
- Simple randomized sampling was carried out for this study.

A) Inclusive Criteria:

- Patients who have dark brown pigmented patches over face
- Age - 20 years to 45 years
- Chronicity of illness – 1 to 5 years.
- Irrespective of number of patches over face.

B) Exclusive Criteria:

- Suffering from any systemic and dreadful diseases.
- Patients with Post inflammatory pigmentation and oozing.

C) Diagnostic Criteria

- Shyaava (Dark brown)
- Tanu (Thin / less quantity)
- Mandala (Circular patches)
- Neeruja (painless)

INTERVENTION

1. Initially the patient was advised to clean the face with lukewarm water.

2. Lepa was prepared with Krishna Musali choorna with honey and ghee was given for application on the affected areas.

3. It was advised that Quantity and thickness of Lepa was sufficient enough to cover the lesion completely.

4. Duration of Each Application - Until the Lepa gets dried and once it dries the patient was asked to wash the face with warm water.
5. **Intervention period**- For 21 days once daily

6. Post treatment assessment-After 21 days

**CRITERIA FOR ASSESSMENT**

The improvement provided by the therapy was assessed on the basis of following parameters:

1. **Colour of Patches**
   - Normal Skin Colour - Grade 0
   - Light brown patches - Grade 1
   - Dark brown Patches – Grade 2
   - Bluish black colour – Grade 3

2. **Number of Patches**
   - No lesions Grade 0
   - 1-2 Grade 1
   - 2-4 Grade 2
   - 4-6 Grade 3
   - >6 Grade 4

3. **Size of Patches**
   - 0-2cm Grade 1
   - 2-4cm Grade 2
   - 4-6cm Grade 3
   - >6cm Grade 4

**Other Associated symptoms**

1. Itching
   - No Itching Grade 0
   - Mild Itching Grade 1
   - Moderate Itching Grade 2
   - Severe Itching Grade 3
2. Burning

<table>
<thead>
<tr>
<th>Sensation</th>
<th>Grade</th>
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<tbody>
<tr>
<td>No Burning sensation</td>
<td>0</td>
</tr>
<tr>
<td>Mild Burning sensation</td>
<td>1</td>
</tr>
<tr>
<td>Moderate Burning sensation</td>
<td>2</td>
</tr>
<tr>
<td>Severe Burning sensation</td>
<td>3</td>
</tr>
</tbody>
</table>

**Statistical analysis:**

The results have been analyzed statistically using student t test, i.e paired t test.

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Mean BT</th>
<th>Mean AT</th>
<th>S.D</th>
<th>S.E</th>
<th>T Value</th>
<th>P value</th>
<th>Relief %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour of Lesion</td>
<td>1.967</td>
<td>1.067</td>
<td>1.067</td>
<td>0.9509</td>
<td>10.26</td>
<td>&lt;0.001</td>
<td>45.75%</td>
</tr>
<tr>
<td>No of Lesion</td>
<td>2.133</td>
<td>1</td>
<td>2.368</td>
<td>1.196</td>
<td>12.23</td>
<td>&lt;0.001</td>
<td>53.11%</td>
</tr>
<tr>
<td>Size of Lesion</td>
<td>1.933</td>
<td>1.167</td>
<td>0.379</td>
<td>0.092</td>
<td>7.389</td>
<td>&lt;0.01</td>
<td>39.62%</td>
</tr>
<tr>
<td>Itching over lesion</td>
<td>0.6333</td>
<td>0.0667</td>
<td>0.2537</td>
<td>0.04632</td>
<td>4.958</td>
<td>&lt;0.05</td>
<td>89.47%</td>
</tr>
<tr>
<td>Burning Sensation</td>
<td>0.6000</td>
<td>0.1000</td>
<td>0.3051</td>
<td>0.5571</td>
<td>4.785</td>
<td>&lt;0.01</td>
<td>83.33%</td>
</tr>
</tbody>
</table>

**Mean of Improvement in Percentage** 62.25%

Figure 1: showing effect of therapy on colour of lesion

![Colour of Lesion Graph](image_url)

Figure 2: showing effect of therapy on Number of Lesions
Figure 3: showing effect of therapy on Size of Lesion

Figure 4: showing effect of therapy on Itching Over Lesion
Figure 5: showing effect of therapy on Burning Sensation and Itching over Lesion.
Overall effect of Therapy on Vyanga

<table>
<thead>
<tr>
<th>Assessment</th>
<th>No. of patients</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cured</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Improved</td>
<td>28</td>
<td>93.33%</td>
</tr>
<tr>
<td>Unchanged</td>
<td>2</td>
<td>6.67%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

DISCUSSION

Vyanga can be correlated to Melasma, which is the most common skin manifestation in India especially during the age of 20 to 45 years. Incidence rate is about 0.025 to 6% of population. Now a day’s use of chemicals, polluted environment, stressful life & emotional disturbance definitely plays major role in manifestation of Melasma.

In our classics it has been mentioned that Manasika Nidana for Vyaṅga is mainly stated to be as Krodha, and Ayasa which in turn vitiate Pitta and Vata respectively. An emotional stress is a prime factor in causation of Vyaṅga. Stress is an influential factor in pigmentary disorders and it can also precipitate to the etiologic pathway of a cutaneous manifestation thus it is necessary to treat it and to prevent discoloration and disfiguring of face.

Probable mode of action of drug is based on the Rasa, Guna, veerya and vipaka. The drug Krishna Musali is having Madhura, tikta rasa, does the shaman of prakrupita vata and pitta doshas, thus maintains the equilibrium of doshas, mainly pitta dosha which is main vitiated Dosha in Vyanga.

As it is having sheeta, Picchila, and guru gunas, which brings Mardhavata to the skin, pacifies ruksha guna of vata and does pitta shamana by sheets guna. Madhura vipaka by virtue of its snigdha guna and Kapha kara properties is responsible for Varna Utkarsa, thus the drug is absorbed into circulation by virtue of its Vipaka. As Krishna Musali choorna is mixed with Ghrita (ghee) and Madhu (honey), both of them enhances the varna.
CONCLUSION

Promising clinical efficacy was found from trial drug Krishna Musali in both subjective (Shavatanuvarna mandala) and objective (Colour of patches, number of patches, size of patches) parameters without any clinical side effects. Overall 62.25% of mean improvement was observed on all the assessment parameters.

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