EVALUATION OF SIDDHARTHAKADI LEPA IN ACNE VULGARIS (MUKHADUSHIKA)

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INTRODUCTION

Today's lifestyle, irregular diet and pollution are directly affecting the skin, causing many skin diseases and most common in them is Acne Vulgaris (Mukhadushika). Total 30 individuals were selected for study of age group 15 yrs - 30 yrs. Individuals were given Siddharthakadi churna for Face pack (Mukha Lepa). After complete assessment, it was found that out of 30 individuals 21 individuals showed reducing the Acne Vulgaris (Mukhadushika). Pain (Ruja) was absent in all individuals after treatment. These results were observed due to kapha-vatakha, kledagha, shothagha, shoolhara, varnya, raktaprasadhak, tridoshasamak properties of Siddharthakadi Lepa.

**Keywords:** Acne Vulgaris Mukhadushika, Siddharthakadi lepa

Face pack (Muk Lepa) is simple, quick and pleasurable way to make someone healthier and happier. The Study was aimed to study the Effect of Siddharthakadi lepa in Acne Vulgaris (Mukhadushika). Total 30 individuals were selected for study of age group 15 yrs - 30 yrs. Individuals were given Siddharthakadi churna for Face pack (Mukha Lepa). After complete assessment, it was found that out of 30 individuals 21 individuals showed reducing the Acne Vulgaris (Mukhadushika). Pain (Ruja) was absent in all individuals after treatment. These results were observed due to kapha-vatakha, kledagha, shothagha, shoolhara, varnya, raktaprasadhak, tridoshasamak properties of Siddharthakadi Lepa.

**INTRODUCTION**

Today's lifestyle, irregular diet and pollution are directly affecting the skin, causing many skin diseases and most common in them is Acne Vulgaris (Mukhadushika).

Mukhadushika is explained by Sushruta under kshudra rogas \textsuperscript{1} and is considered as swatantra vyadhi in the ayurvedic literature. It is characterized by shalmali kan-taka sadrsha pidikas on face. It correlates to Acne Vulgaris explained in modern science. According to modern medical science, acne is a chronic inflammatory condition of the pilo sebaceous units, characterized by the formation of comedones, erythematic papules and pustules, less frequently nodules or cysts too.\textsuperscript{2} It is the commonest dilemma associated with complexion and smoothness of skin. Sometimes leading to major skin problem, which is characterized by maculo, papulo, pustular eruptions on the skin especially on the face. A both male and female gender of adolescent age group is commonly affected. This disease is seen most from the cosmetic point of view than a medical one. The references for the disease of Acne Vulgaris (Mukhadushika) are well found in ayurvedic literature and is the most common problem that is met in general practice.\textsuperscript{3} As it decreases the complexion and smoothness of the face, so this vyadi is known as Mukhadushika.\textsuperscript{4} Face is the index of mind and a beauty. Cosmetic impact of deformities on the face is far reaching and in order to improve the complexion various soundarya vardhak dravyas were used in older times as similar to today’s scenario. This created an interest to study the various aspects of the disease. Lepa procedure is described in many samhita, it harnesses the effect of mukhadushika as well as increase the mukhakanti.\textsuperscript{5} Medicines in the form of a paste for external application are called lepas. Lepas open the circulatory channels, facilitates the metabolic activity and improves the complexion of skin.
AIMS AND OBJECTIVES:
The present research trial was undertaken with the following main objectives:

- To assess the role of Siddharthakadi lepa in management of Mukhadushika (Acne vulgaris).
- To study the role of Siddharthakadi lepa in prevention of recurrent Mukhadushika (Acne vulgaris).

MATERIALS AND METHODS:
Selection of Cases: The study recruited a population of 30 clinically diagnosed patients of Acne Vulgaris (Mukhadushika) selected from O.P.D. unit of Department of Swasthavritta Bharati Medical Foundation’s Ayurved Hospital Pune, Maharashtra, India. A regular record of the assessment of all patients was maintained according to form prepared for the purpose. Following inclusion and exclusion criteria were used for registration of the patients for present clinical trial.

Inclusion Criteria:
- Individuals between the age group of 12-30 years irrespective of sex, caste, occupation and socioeconomic status
- Individuals of Acne Vulgaris (Mukhadushika) having pitikas with Ruja, sankhya, akar and daha on the face were included in the study.

Exclusion Criteria:
- Individuals below 12 years and above 30 years of age.
- Individuals in whom Mukha Udwartana is contraindicated were not registered.
- Individuals suffering from any skin disorders with alcohol dependency or drug dependency were excluded from the study.

SELECTION OF DRUGS:
Taking the symptoms and the Samprapti of Mukhadushika into consideration, a proposed drug formulation namely "Siddharthakadi Lepa" was selected. The drug selected for the study contained mainly Siddharthaka (Brassica campestris), Vacha (Acorus Calamus), Lodhra (Symlocos racemes), Saindhav (Unaqua Sodum Chloride). Siddhartaka (LATIN NAME Brassica campestris FAMILY Cruciferae SYNONYMS Katusneha, Tantubha, Sarasapra RAS Katu/Tikta VIRYA Ushna Doshghanta Kaphavataghna Upyuktanga Beeja GANA Rajika kula. Vacha (LATIN NAME Acorus Calamus FAMILY Arieaceae SYNONYMS Uragandha, Golomi, Vekhand RAS Katu/Tikta VIRYA Ushna Vipaka Katu Guna Tikshna, Snigdha Doshghanta Kaphavataghna Upyuktanga Gana Virechan, Lekhaniya, Arshoghna, Truptighna, Asthanopaga, Shirovirechana. Lodhra (LATIN NAME is Symlocos racemes FAMILY Symlocaceae SYNONYMS Varkal, Tilva, Rodhra, Jirnapatra, Galav, Kro mark RAS Kashaya VIRYA Sheet Vipaka Katu Guna Laghu. Ruksha Doshghanta Kaphghna, Pittaghna Upyuktanga Twak Gan Charak Shonitsthapan, Purishsangrahaniya, Kashayaskand, Sandhana. Shusruta- Lodhradi, Nigrodhadi), Saindhav (CHEMICAL NAME Unaqua Sodium Chorodium RASA Lavan VIRYA Sheeta Vipaka Madhura Guna Laghu, sukshma, snigdha Doshaghnata Tridoshaghna. [6].

METHOD OF PREPARATION: Siddharthakadi Lepa containing Siddharthaka (Brassica campestris), Vacha (Acorus Calamus), Lodhra (Symlocos racemes), Saindhava (Unaqua Sodium Chloride) was prepared.
ADMINISTRATION OF DRUG & TREATMENT SCHEDULE:
Siddharthakadi Lepa (10 – 15 gm) was applied on the face opposite to the direction of orientation of hairs 1/4th Angula thick as local application in the morning for 10-15 min for a duration of 21 days as per guidelines mentioned in Sharangdhara Samhita Uttarkhandha.

PRE TREATMENT OBSERVATIONS:
All the individuals have been studied along with the registration by noting down their demographic profile including their age, sex, occupation, education, socio economic status, marital status, life style, addictions, dietary habits etc. After preliminary registration, individuals were subjected to detailed case history taking, physical, general and systemic examinations. In history and examination importance was given to mental status examination.

During this all other relevant informations like Ashtavidha Pariksaha and Dashavidha pariksha including assessment of Sharirika Prakriti and Manasika Prakriti(based on the features described in classical texts) etc. were noted.

Individuals were followed up on a weekly basis for total duration of 50 days for post treatment followup and changes, improvements, deterioration and any other effects produced after the therapy were noted down.

Criteria of Assessment:
Both subjective and clinical improvements were employed for assessment of the impact of the therapy. Subjective criteria of evaluation included the observations of both patients and assessment of the physician. Gradation scale was done for sankhya, aakar, ruja, daha as follows:

1) RUJA (Pain Level):
- Grade – 0 No Pain
- Grade – 1 Mild Pain
- Grade – 2 Moderate Pains
- Grade – 3 Severe Pains

2) SANKHYA [Numbers]:
- Grade – 0 No pitika (0)
- Grade – 1 Mild pitika (1-5)
- Grade – 2 Moderate pitika (6-10)
- Grade – 3 severe pitika (More than 10)

3) AAKAR [Size]:
- Grade – 0 No pitika
- Grade – 1 Sarshapa size
- Grade – 2 Mudga size
- Grade – 3 Masur size

4) DAHA [Burning sensation]
- Grade – 0 No daha
- Grade – 1 Mild daha
- Grade – 2 Moderate daha
- Grade – 3 severe daha

OBSERVATION AND RESULTS:
In the present study 30 patients were studied. After completion of the clinical study, observations in Mukhadushika were recorded in the form of charts and tables. Observations related to – Age, sex, diet, size, sankhya, prakriti were recorded as follows. It was observed that 46.6% of patients were from the age group of 15-20yrs, 33.33% were of 21-25yrs and 20% were of 26-30yrs of age. Majority of female patients were registered for study i.e. 18(60%) and male patients were 12 (40%).

In the present study it was observed that 3 (10%) were of vata pitta prakruti, 4 (13.33%) were of vata kapha prakruti, 10 (33.33%) were of pitta kapha prakruti, 4 (13.33%) were of pitta vata prakruti, 3 (10%) were of kapha vata prakruti and 6 (20%) were of kapha pitta prakruti. Out of 30 patients 20 (66.66 %) were of mixed diet group and 10 patients (33.33%) were of vegetarian diet group. So maximum
numbers of patients are from “mixed diet” group. It was observed that out of 30 patients, students were 15 (50%), Housewives were 3 (10%), Outdoor workers were 8 (26.66%), Indoor workers 4 (13.33%).

**GRAPH 1: RESULTS OF PATIENTS IMPROVED ACCORDING TO SANKHYA CRITERIA:**

![Graph 1](image1)

**GRAPH 2: RESULTS OF PATIENTS IMPROVED ACCORDING TO AKARA CRITERIA:**

![Graph 2](image2)

**GRAPH 3: RESULTS OF PATIENTS IMPROVED ACCORDING TO RUJA CRITERIA:**

![Graph 3](image3)
DISCUSSION

Using Wilcoxon Sign Rank Test comparison of two dependent samples was done with the following results:

1) SANKHYA

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentage of relief</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.T.</td>
<td>30</td>
<td>2.367</td>
<td>0.6687</td>
<td>71.83%</td>
<td>0.0001</td>
</tr>
<tr>
<td>A.T.</td>
<td>30</td>
<td>0.6667</td>
<td>0.6609</td>
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<td></td>
</tr>
</tbody>
</table>

2) AKARA

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentage of relief</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.T.</td>
<td>30</td>
<td>1.433</td>
<td>0.6261</td>
<td>72.09%</td>
<td>0.0001</td>
</tr>
<tr>
<td>A.T.</td>
<td>30</td>
<td>0.400</td>
<td>0.6215</td>
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</tbody>
</table>

3) RUJA

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentage of relief</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.T.</td>
<td>30</td>
<td>1.167</td>
<td>0.6989</td>
<td>77.14%</td>
<td>0.0001</td>
</tr>
<tr>
<td>A.T.</td>
<td>30</td>
<td>0.2667</td>
<td>0.4498</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4) DAHA

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentage of relief</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.T.</td>
<td>30</td>
<td>1.067</td>
<td>0.7397</td>
<td>68.75%</td>
<td>0.0001</td>
</tr>
<tr>
<td>A.T.</td>
<td>30</td>
<td>0.3333</td>
<td>0.4795</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All the above findings strongly suggest that Siddharthakadi Lepa have potent effect on the management of Acne Vulgaris (Mukhadushika). Various scientific parameters in the current study confirmed this observation which showed significant and highly significant improvement respectively.

Samprapti Ghataka of Mukhadushika:-

_Dosha_: Kapha, Vata pradhana
_Dushya_: Rasa (Twacha), Rakta, Meda
_Strotas_: Rasavaha and Raktavaha
Probable mode of action of Siddharthakadi Lepa:

According to classics, pitta prakruti persons are more prone to pitta, hence it can be state that mukhadushika is quite common in pitta associated with kapha and vata prakruti. Siddharthaka and vacha have vata shamak, kledhar properties by their ushna guna, tikta-katu rasa which reduced sankhya of mukhadushika.

Laghu, ruksha guna and ushna virya of Siddharthakadi churna and lekhana properties of lepa process removed kled from twak and reduced the size of pitika. Siddharthaka and vacha have vedanasthapana property by their ushna guna and katu rasa which diminished the vata prakopa Daha was abridged because of pitta shamaka & sheeta virya properties of Lodhra & Saindhava.

**CONCLUSION**

The conclusion of the present study is that Age (Vaya) is the pradhana hetu, this may be due to increase in hormonal activity at that age group and more stress level.

The other nidanas such as aharaja, viharaja are nimitta hetus. Pitta dosha pradhana prakruti persons are more susceptible to Mukhadushika i.e., Pitta associated with kapha or pitta associated with vata. Excessive in-take of apathyakar aahara vihara, in yuva avastha are important hetus of Mukhadushika. Application of Siddharthakadi lepa is very beneficial for Mukhadushika. Hence its role in disease was proved. Siddharthakadi lepa reduces ruja, sankhya, akar and daha of mukhadushika.

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