MATERIALS AND METHODS

Since the etiology of the disease ‘Psoriasis’ is not well established, so the treatments employed are uncertain. The disease is conventionally managed by topical and systemic medications. This conventional method of treatment has consequences leading to risk of developing squamous cell carcinoma of the skin.

Irrespective of proper employment of treatment, chronic course with exacerbation and remission and tendency to relapse even after complete remission makes this disease stand away from other dermatoses.

Considering all these facts what seems to be the need of the hour is an alternative remedy which can deliver relief to the agonized patients of psoriasis, so that they can lead a normal life.

Many efforts have been made to treat psoriasis in the Ayurvedic line of treatment. Some of them were found effective but a 100% success is yet to come. Here the study of Kustaghna Mahakasaya and Takradhara in the management of psoriasis has been evaluated. As per references in Ayurvedic text the use of Kustaghna Mahakasaya is mentioned in different types of skin diseases. The effectiveness of Takradhara as a traditional medicine in the treatment of psoriasis is reported in some earlier studies and it is mentioned in Dharakalpa – a traditional Kerala Ayurveda. Hence this clinical study has been taken based on the references as in Ayurvedic Samhitas and Dharakalpa to evaluate the efficacy and effect of Kustaghna Mahakasaya and Takradhara.

AIM & OBJECTIVE:
The study was undertaken with the following aim and objectives-
   i) Literary study on Kitibha (Psoriasis) from both Ayurvedic and modern point of view.
   ii) Evaluation of the effect of Kustaghna Mahakasaya and Takradhara in the management of Psoriasis.

MATERIAL & METHODS:
1. Source of Data:
The Clinical study was conducted at Kayachikitsa OPD and IPD at Govt. Ayurvedic College & Hospital, Guwahati, Assam.
2. **Method of Collection Data:**

Study will be carried out on the patients diagnosed as suffering from Kitibha in the age group 10-65 irrespective of sex, religion, economic status and occupation.

The total nos. of patient taken for study were 128. Out of 128 patients, 28 patients dropped out. Duration of the treatment was 45 days. The patients selected for study were divided into 2 groups as Group A and Group B.

The inclusion of the two patients in these two groups was done randomly. In both the groups Kusthaghna Mahakasaya was given uniformly. However in the group B, Takradhara was given in addition to the Kusthaghna Mahakasaya. The selected patients were interviewed along with their family members and relatives to obtain detailed information about the patient as well as the disease and collected indifferent data along with previous medication and investigation.

1. Demographic profile
2. Clinical profile of the patient

Demographic profile: The patient’s name, age, sex, religion, address, occupation, dietary habit, socio economic conditions data collected under demographic profile.

Clinical profile: Data under clinical profile include-
- Chief complain with total duration of illness
- Onset of disease- Acute/sub-acute/chronic
- Assessment of clinical feature
- Precipitating factor-relation with personal hygiene
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- Relation with diet, stress, Addiction
- Relation with seasonal variation

- Previous drug history (if any)
- Family history

Criteria for selection of patient:

a) Inclusion Criteria:
   i) Patient between age group of 10-65 years.
   ii) The patient having cardinal symptom of psoriasis like erythematous papules/plaques covered with dry brittle, silvery, grayish white micaceous scale, Auspitz sign, Kobner phenomenon, Candle grease sign etc.

b) Exclusion Criteria:
   i) Patient beyond the age group 10-65 years means below 10 years and over 65 years.
   ii) Patient suffering from other systemic diseases like cancer, AIDS, Diabetes, TB etc.
   iii) Patient having other skin disease.
   iv) Pregnant lady

Physical examination: Examining the patient physically his/her general condition, pulse rate, blood pressure, pallor, icterus, cyanosis etc. were recorded at the initial study and successive follow up visits.

Systemic Examination: In this segment of examination of various organ systems of the patient viz. Cardio vascular system, Respiratory System, Central Nervous system, urogenital system, Locomotors system and last but not the least the examination of Skin was done.

3. Study Designs: Open Trial

4. Drug:
   i) Kusthaghna Mahakasaya in Kwath form
   ii) Takra

Selection of the drug:

Kusthaghna Mahakasaya is an indigenous drug. It is mentioned in Charak Samhita, Sutra Sthan chapter 4/92. The ingredients have properties like-kusthaghna,
Materials and Methods

kandughna, vishaghna, rakta sodhanetc as described in previous chapter of trial drug review advocated by various Ayurvedic classic and Nighantus.

Additional criteria for selection:

1. The drug is easily procurable, economic and within the reach of majority of the patient.
2. Administration of the drug is not complicated.
3. Drug is not hazardous and addictive.

Preparation of the drug (internal):

Kustaghna Mahakasaya is composed with 10 drugs. Out of these ten drugs, two drug Bhallatak and Karavira was not included in my trial drug since both the drug has toxic effect over the body as mentioned in Ayurvedic classics. Chakrapani mentioned in Sadvirechaniya Satasritiya addhaya on Chatrak Samhita that according to Sringa Grahik Nyaya the total numbers of any mahakasayas can be varied since based on the similar qualities one group is formed. All the 10 drugs of Kustaghna Mahakasayas having the similar qualities and hence selecting 8 numbers of herbs from 10 herbs does not make any difference since 80% of drugs were taken for the trial drugs. According to Sringa Grahik Nyaya when we hold the Sringa i.e. horns of an animal, Sringi i.e the animal comes in one’s own grip without holding other part of that animal. Henceforth taking 8 plants out of 10 is acceptable. Another justification for exclusion of Bhallatak was the Kwath preparation of Bhallatak is not indicated in 10 preparations of Bhallatak in Rasayanpada of Charak Samhita. (Chakrapani on Ch.Su.4.19; Ch.Chi.1.2.16)\(^{156}\)

All the 8 ingredients were properly identified by the expert in this field. The proportions of the ingredients in the drug were

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Proportion</th>
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<tbody>
<tr>
<td>Khadir</td>
<td>1 part</td>
</tr>
<tr>
<td>Amlaka (Amlaki)</td>
<td>1 part</td>
</tr>
<tr>
<td>Nisha</td>
<td>1 part</td>
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<tr>
<td>Abhaya</td>
<td>1 part</td>
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<tr>
<td>Saptaparna</td>
<td>1 part</td>
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<tr>
<td>Chaturangula</td>
<td>1 part</td>
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<tr>
<td>Vidanga</td>
<td>1 part</td>
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<tr>
<td>Jati</td>
<td>1 part</td>
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</tbody>
</table>
The ingredients were collected and dried in shades. The drug is prepared in Yabakutchurna form and packed 200gm each packet and supplied to the patients. Patients were taught how to prepare the decoction by adding 320 ml of water in 40gm of crude drug and thereafter asked the patient to boil up to the reduction of 80 ml (1/4th of the total water) then filtered. After filtering he/she was advised to take 40 ml twice daily after food. The decoction which was prepared on a certain day, the same was advised to take on the same day.

**External medication:**

**Takradhara:** It is only for external application and not prepare for internal uses. It contains curd only.

**Preparation of Takra**: 

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मन्दानादिपुश्यत्संहलयांक्ष च खत्।

नातिसान्द्रत्वतक्री न्यायमलं तुवरं रसे।।
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(Su.Su. 45/86)

**Ingredients :**

1. Curd.
2. Water.

**Procedure:** First 1 (one) litre of curd was taken on a vessel and thereafter it was churned for 15 minutes. After churning the fatty part which was deposited at the most upper part of the vessel was removed. Then half liter of water was added in that churned curd and again churned. Then this mixture named as Takra was prepared and was ready for use.

**Application of Takra:**

Takra was introduced to the patient in dhara form over the affected part and the head for 15 minutes in each and every area initially for 15 consecutive days and continued up to 45 days.

**Advice to the patient during treatment:**

i) Not to use any other drug for Psoriasis
ii) Advice to avoid synthetic drug
iii) Not to use soap particularly over the affected body parts.

**Parameter for assessment of result- Criteria for assessment of treatment:**
The assessment of severity was carried out based on two components:
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- The patient’s own perception of disability - that is need for treatment and
- Subjective assessment of the extent and severity of body involvement.

Since the degree of disability experienced by different people with the same amount of psoriasis varies greatly, therefore, the aim of management was determined in close association with the individual patient’s views.

The following disease symptoms were graded and used as criteria for the purpose of assessment of clinical results.

**Itching** –

a) Severe (3) – if itching disturbs the day today activities including sleep

b) Moderate (2) – if itching disturbs only sleep.

c) Mild (1) – if no disturbances in activities and sleep but only complains of itching.

d) Normal (0) – No itching

**Scaling** –

a) Severe (3) – If scaling covers maximum areas in the body

b) Moderate (2) – If scaling appear in the limb

c) Mild (1) – If scaling seen over minor parts

d) Normal (0) – No Scaling

**Erythema**

a) Sever (3) – More reddish in colour

b) Moderate (2) – pinkish red

c) Mild (1) – White mixed red

d) Normal (0) – No erythema

Based on the above grading the response of the patients to treatment were assessed and scores were given accordingly. The patterns of response of patients to the treatment were obtained through scoring technique (Edwards, 1969). The scoring method was done such that each score was assigned to five categories of response such that the largest weight was always assigned to the most favorable response and 0 weights to the least favorable response. In this study, the different categories of response to treatment with the given score were assessed as follows—

Score 0 = No relief.

Score 1 = Mild relief (25%).
Score2 = Moderate relief (50%).
Score 3 = Marked and complete relief (75% and above).

DATA ANALYSIS:

The data obtained from the above treatment were then organized and summarized using the method of frequency distribution. The data were then analyzed using appropriate statistical tools such as arithmetic mean, percentages, standard deviation and Z-test of significance.