COMPARATIVE STUDY OF ABHYANGA, AWAGAH AND TAKRADHARA WITH INTERNAL MEDICINE IN EKAKUSHTHA (PSORIASIS)

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ABSTRACT

The clinical features of Ekakushtha are Aswedanam (Anhydrosis), Mahavastu (Large area) and Matsyashakalopamam (Scaling). Ekakushtha can be compared with ‘Psoriasis’ due to its maximum resemblance. Approximately 2 -5% of the world suffer from this disease. Patients of skin disease always experience physical, emotional and socio-economic embarrassment in the society. It is found to be the second most common cause for loss of work. Abhyanga (Topical application) by KutajadiTaila, AwagahSweda with Nimbajala, Takradhara, Mahamanjishtadikwatha are described as effective Ayurvedic medicines in Kushtha. In present era there is no such medicine to cure Ekakushtha disease, therefore said research project is undertaken to check the Ayur-vedic claims are justify or not. Aim- To compare the effect of Abhyanga, Awagah and Takradhara with Internal Medicine in patients of Group ‘A’ with Abhyanga, Awagah and Takradhara with Internal Medicine in patients of Group ‘B’. Conclusion- This clinical study shows that, there is no significant difference between the effect of Abhyanga, Awagah and Takradhara in Patients of Group ‘A’ with Abhyanga, Awagah and Takradhara with Internal Medicine in patients of Group ‘B’. Reduction in the cardinal signs and symptoms of Ekakushtha viz Matsyshakalopamam was found significant in both the group but not significant in Mahavastu and Aswedanam in both the groups. Reduction in the associated signs and symptoms of Ekakushtha viz Kandu and Rukshata was found significant in both the group by using Mann Whitney Tests.

Keywords: Ekakushtha, Kutajaditaila, Nimbakwatha, Takradhara, Mahamanjishtadikwatha.

INTRODUCTION

In Ayurved, all the skin disease has been described under the umbrella of Kushtha. The clinical features of Ekakushtha are Aswedanam (Anhydrosis), Mahavastu (Large area) and Matsyashakalopamam (Scaling). It is Vatakaphapradhana. Ekakushtha can be compared with ‘Psoriasis’ due to its maximum resemblance. Approximately 2 -5% of the world suffers from this disease. Patients of skin disease always experience physical, emotional and socio-economic embarrassment in the society. It is found to be the second most common cause for loss of work.

We observed that Abhyanga (Topical application...
tion) by self-formulated KutajadiTaila followed by AwagahSweda by Nimbajala cures Kandu, Rukshata of skin, Stops shed down the patches. Takradhara cures emotional disturbances there by brings tranquility to mind and cures Dhatvaagnimandya. Mahamanjish tadikwath is indicated in Kushttha. In present era there is no such medicine to cure Ekakushtha disease, there- fore said research project is undertaken to check the Ayurvedic claims are justify or not.

Aim: To compare the effect of Abhyanga, Awagah and Takradhara in Patients of Group ‘A’ with Abhyanga, Awagah and Takradhara with Internal Medicine in patients of Group ‘B’.

Objectives: 1. Reduction in the cardinal signs and symptoms of Ekakushtha viz Matshyshakalopamam, Mahavastu and Aswedanam. 2. Reduction in the associated signs and symptoms of Ekakushtha viz Kandu and Rukshata.

Hypothesis: H₀: There is no significant difference between the efficacy of the treatment in Group ‘A’ and Group ‘B’. (i.e. Abhyanga, Awagah and Takradhara in Group ‘A’ and Abhyanga, Awagah and Takradhara with Internal Medicine in Group ‘B’).

H₁: There is significant difference between the efficacy of the treatment in Group ‘A’ and Group ‘B’.

MATERIALS AND METHODS-
Materials:
I) Preparation of KutajadiTaila-
Ingredients of KutajadiTaila: i) Kutaja (Holarrhenaantidysentrica Wall.) ii) Chitrak (Plumbagozyylanica Linn), iii) Nimba (Azardicaindica Linn.) iv) Aragwadha (Cassia fistula Linn.), v) Khadir (Acacia catechu Linn.) vi) Aasan (Bee- jak)(BrideliaretusaSpreng.), vii) Saptparn (Alstoniascholaris (L.) R. Br. and viii) Manjishtha (Rubiacordifolia Linn.). NarikelTaila (Coconut Oil) was used for base of the oil, we have purchased from Pu- ne market and their authentication was done from Department of Botany, Pune University. We have used bark of Kutaj, Nimba, Aragwadha, Khadir, Asana, Saptaparna and root of Chitraka and Manjishtha for Bharad (Course powder).

Total Taila required 30 litres.

SOP: Ingredients Bharad (course Powder) 30 kg (equal quantity of Kutaj, Nimba, Aragwadha, Khadir, Asana, Saptaparna, chitraka and Manjishtha around 3.8 kg) and water 480 litres were boiled till 1/4 th water remains i.e. 120 litres kwatha. 120 Litre kwatha and 30 litre of coconut oil were boiled on medium heat till only Taila re- mains and snehasiddhilakshanas were ob- served. Taila preparation was done in Rasashastra and Bhaishajyakalpana De- partment, BVDU Ayurved College, Pune. Standardization of KutajadiTaila was done at B, V, Bhide Lab, Tilak Road, Pune.

II) Preparation of NimbaKwatha-
Nimba7 (Azardicaindica Linn.) was pur- chased from Pune market and their authenti- cation was done from Department of Bota- ny, Pune University. NimbaKwath was pre- pared during clinical trials in Panchakarma unit BVMF’S Ayurved Hospital, Pune. We- took course Powder 120gm bark of NimbaBharad, water 1 liter and boiled till quantity remains 250ml. Standardization of NimbaKwatha was done at B. V. Bhide Lab, Tilak Road, Pune. Every time we examined the quality of Kwatha with the help of hy- drometer method for maintaining uniformi- ty. At the time of con- ducting each trials fresh Kwatha of
NimbaBharada was prepared in treatment unit of Department of Panchakarma, we examined quality with the help of hydrometer method.

**SOP of NimbaKwathaSiddhajala:** 250 ml NimbaKwatha as per prepared above said SOP was added in warmed water having quantity 180 liters for preparation of KwathaSiddhajala.

**III) Preparation of Takra:** Ingredients of Takradhara are Amalaki (Emblikaofficinalis Linn.), Musta (Cyperusrotundus Linn.) were purchased from Pune market and their authentication was done from Department of Botany, Pune University. i) Amalaki (total for all patients 34kg) ii) Musta (total for all patients 17 kg) and iii) Cow’s milk for preparing butter milk. Takra was prepared during clinical trials according to Dr. Muss in Panchakarma unit BVMF’S Ayurved Hospital, Pune. i) Takra-1280 ml Cow’s milk added with water 5120 ml and 80 gm MustaChurna was boiled till milk was remaining 1280 ml. When cooled little sour buttermilk was added and curd was prepared. By churning prepared butter milk approximately 1 liter. ii) Kwatha-Amala 160 gm was added with approximately 6 liter water and boiled till approximately 1 liter was remained. This Kwatha was mixed in Takra

**IV) Internal Medicines:** Mahamanjishthadikwatha was purchased from Pune market of renowned company.

**Methods:** Project proposal was submitted to Bharati Vidyapeeth Deemed University Pune-30, under the scheme of minor research projects for grant-in-aid. When grant was sanctioned (Ref.No.B.V.D.U. /A- 16/211-12/4282, Date-07/02/2012) then we presented protocol before institutional ethics committee and took approval and project was registered to the Clinical Trial Registry of India (CTRI/2012/08/002867) and then clinical trials were started. Total 30 patients were selected as per symptoms given by Charak in Panchakarma OPD of BVMF’S Ayurved hospital, Pune-43. Patients were selected randomly and placed into two groups i.e. 15 patients in each group named Group A and Group B. Patients from Group A have done local application on patches daily once at 8 o’clock morning with KutajadiTaila, Awagah daily once in the morning after local application of taila on patches by NimbKwath and Takradhara daily once in the morning after Awagah. Each 7 Days. Patients from Group B were treated by Internal Medicine Mahamanjishthadikwatha 4TSP/Twice/ after lunch and dinner with luke water and treatments of Group A. Duration of Abhyanga, Awagah and Takradhara- Each 7 Days and of Internal medicine 7 days. Route of Administration is Skin and Oral. Pathya was advised as Laghuanna, TiktaRasapradhanshak, Ghruta, Purandhanya, Mudga. KutajadiTaila was given to the patient for local application on the patch till follow up. Apathya were avoided in diet as Guruanna, AmlaRasa, Dugdha, Dadhi, Matsya, guda.

**Inclusion criteria:** 1. Ekakushtha patients diagnosed as per symptomatology described by CharakSamhita viz- Aswedanam (Anhydrosis), Mahavastu (Large area) and Mat- sysashakalopamam (Scaling),

2. Patients of age group 18 years to 70 years
3. Patients of both sexes.

**Exclusion criteria:** 1. Patients below age 18 years and above 70 years were excluded.
2. Patients who were not able to come for the follow up as per schedule.
3. Patients who were contraindicated for Abhyanga, Awagah and Takradhara as explained by Charak Assessment Criteria

Patients were initially assessed on 1st day before the treatment was started. Then 2nd assessment was done on 7th day in group A and group B. Followups were taken on days 30th and 60th from completion of treatment for relapse of symptoms if any. i) Asvedanam (Anhydrosis):- Score given to Observational Parameters i) Normal sweating - 0, ii) Improvement - 1, iii) Present in few lesion – 2, iv) Present in all lesion – 3, v) Asvedanam in lesion and uninvolved skin. 

ii) Mahavastu (Large area):- [Evaluated affected body area in % (Here we use rule of 9 for Burn patient), i) Head region % ii) Upper extremities region % iii) Trunk region %, iv) Lower extremities region %], Range of total Affected body area Score was given i) 0% - 0, ii) 1% - 9% - 1, iii) 10% - 29% - 2, iv) 30% - 49% - 3, v) 50%-69% - 4, vi) 70%-89% - 5, vii) 90%-100% - 6.

iii) Matsyashaklapamam (Scaling):- i) No scaling - 0, ii) Off scaling rate is rare – 1, iii) Off scaling rate is mild – 2, iv) Off scaling rate is moderate - 3, v) Off scaling rate is high – 4. 

iv) Kandu (Itching) - i) No Itching – 0, ii) Mild(Not annoying or troublesome) – 1, iii) Moderate (annoying or troublesome interfere with the daily activity and sleep) – 2, iv) Severe (Very annoying and troublesome, Substantially interfere with the daily activity and sleep) – 3.

v) Rukshata (Dryness) -i) No Dryness – 0, ii) Dryness with rough skin – 1, iii) Dryness with scaling – 2, iv) Dryness with cracking – 3.

OBSERVATIONS AND RESULTS

I. About Demographical Data:

Maximum patients were from the age 40-50 years (40%) in group A and 30-40 years (33.3%) in group B. Maximum patients were male (80%) in group A and Maximum patients were female in group B. Maximum patients were found service holder followed by housewife. Maximum patients were found Vatapittajaprakuti in both the groups. Maximum patients were found having prakrutnidra. Maximum patients were having the lakshana since more than 24 months (66.7 % in both the groups). Indicating Eka-kushtha (Psoriasis) is a jirnavyadhi. Maximum patients were found having Mandagni (40% in group A and 53.33% in group B). Maximum patients were found having MadyamKoshtha in both the groups followed by KruraKoshtha. Maximum patients were found having MadyamSatwa. Aharajhetu was present in maximum patients in both the groups (73.3% in group A and 80% in group B). Viharajhetu was present in patient in group A (66.7%) but absent in maximum patients in group B (53.3% absent). Mansikhetu was present in maximum patients in both groups (73.3% in group A and 60% in group B).

II. Statistical analysis and results about Lakshanas (Symptoms):

Table 1: Efficacy Of Lakshana Aswedanam Within The Group Before And After Treatment.

<table>
<thead>
<tr>
<th>Aswedanam</th>
<th>POSITIVE RANK</th>
<th>NEGATIVE RANK</th>
<th>TIE</th>
<th>Z VALUE</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>0</td>
<td>2</td>
<td>13</td>
<td>-1.4142</td>
<td>0.1573</td>
</tr>
<tr>
<td>Group B</td>
<td>0</td>
<td>2</td>
<td>13</td>
<td>-1.3416</td>
<td>0.17971</td>
</tr>
</tbody>
</table>
The p value is $\leq 0.05$ indicating there is no significant result in Aswedanam in both the group.

**Table 2: Efficacy Of Lakshana Mahavastu Within The Group Before And After Treatment.**

<table>
<thead>
<tr>
<th>Mahavastu</th>
<th>POSITIVE RANK</th>
<th>NEGATIVE RANK</th>
<th>TIE</th>
<th>Z VALUE</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>0</td>
<td>2</td>
<td>13</td>
<td>-1.4142</td>
<td>0.1573</td>
</tr>
<tr>
<td>Group B</td>
<td>0</td>
<td>2</td>
<td>13</td>
<td>-1.4142</td>
<td>0.1573</td>
</tr>
</tbody>
</table>

The p value is $\leq 0.05$ indicating there is no significant result in *Mahavastu* in both the group.

**Table No. 3: Efficacy Of Lakshana Matsyshakalopamam Within The Group Before And After Treatment.**

<table>
<thead>
<tr>
<th>Matsyshakalopamam</th>
<th>POSITIVE RANK</th>
<th>NEGATIVE RANK</th>
<th>TIE</th>
<th>Z VALUE</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>0</td>
<td>12</td>
<td>3</td>
<td>-3.2757</td>
<td>0.00105</td>
</tr>
<tr>
<td>Group B</td>
<td>0</td>
<td>12</td>
<td>3</td>
<td>-3.2757</td>
<td>0.00105</td>
</tr>
</tbody>
</table>

By using Wilcoxon Sign Rank test the p value is $<0.05$ indicating significance in *Matsyshakalopamam* in both the group.

**Table No.4: Efficacy Of Lakshana Kandu Within The Group Before And After Treatment.**

<table>
<thead>
<tr>
<th>Kandu</th>
<th>POSITIVE RANK</th>
<th>NEGATIVE RANK</th>
<th>TIE</th>
<th>Z VALUE</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>0</td>
<td>13</td>
<td>2</td>
<td>-3.3075</td>
<td>0.00094</td>
</tr>
<tr>
<td>Group B</td>
<td>0</td>
<td>14</td>
<td>1</td>
<td>-3.4066</td>
<td>0.00066</td>
</tr>
</tbody>
</table>

The p value is $<0.05$ indicating significance in *Kandu* in both the group.

**Table No.5: Efficacy Of Lakshana Rukshata Within The Group Before And After Treatment.**

<table>
<thead>
<tr>
<th>Rukshata</th>
<th>POSITIVE RANK</th>
<th>NEGATIVE RANK</th>
<th>TIE</th>
<th>Z VALUE</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>0</td>
<td>13</td>
<td>2</td>
<td>-3.5</td>
<td>0.00047</td>
</tr>
<tr>
<td>Group B</td>
<td>0</td>
<td>14</td>
<td>1</td>
<td>-3.5568</td>
<td>0.00038</td>
</tr>
</tbody>
</table>

The p value is $<0.05$ indicating significance in *Rukshata* in both the group.

**Efficacy of Abhyanga, Awagah and Takradhara (Group A) in Ekakushtha (Psoriasis):** By using Wilcoxon Sign Rank test the p value is $<0.05$ indicating significance of *Abhyanga, Awagah and Takradhara* in *Matsyshakalopamam, Kandu, Rukshata* and p value is $\leq 0.05$ indicating not significant result in *Mahavastu* and Aswedanamin Ekakushtha.

**Efficacy of Abhyanga, Awagah and Takradhara with Internal medicine (Group B) in Ekakushtha (Psoriasis):** By using Wilcoxon Sign Rank test the p value is $<0.05$ indicating significance of *Abhyanga, Awagah, Takradhara and Internal Medicine in Matsyshakalopamam, Kandu, Rukshata*, and p value is $\leq 0.05$ indicating not significant result in *Mahavastu* and Aswedanamin Ekakushtha.
Table No.6: Comparison Of Treatment Efficacy In The Lakshans Between Two Groups

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Mean rank group A</th>
<th>Mean rank group B</th>
<th>Mann Whitney U</th>
<th>Z value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aswedanam</td>
<td>16.2</td>
<td>14.8</td>
<td>102</td>
<td>-0.521</td>
<td>0.602366</td>
</tr>
<tr>
<td>Mahavastu</td>
<td>15.4</td>
<td>15.6</td>
<td>111</td>
<td>-0.06672</td>
<td>0.946806</td>
</tr>
<tr>
<td>Matsyashkalopamam</td>
<td>16.2</td>
<td>14.8</td>
<td>102</td>
<td>-0.52225</td>
<td>0.601497</td>
</tr>
<tr>
<td>Kandu</td>
<td>14.76666667</td>
<td>16.23333333</td>
<td>101.5</td>
<td>-0.54764</td>
<td>0.583936</td>
</tr>
<tr>
<td>Rukshata</td>
<td>14.1</td>
<td>16.9</td>
<td>91.5</td>
<td>1.34508</td>
<td>0.178601</td>
</tr>
</tbody>
</table>

By using Mann Whitney Test the value was found >0.05. Null Hypothesis cannot be rejected. Thus there is no significant difference between the efficacies of the treatment in two groups. (Abhyanga, Awagah and Takradhara in Group A and Abhyanga, Awagah and Takradhara with Internal Medicine in Group B).

**DISCUSSION**

The study shows that adults are affected maximum in number. Males are maximum than females. Service holders are suffered maximum in number because of stressful work schedule. Vatapittajprakruti is more prone to this disease. Ekakushtha is a jeerna (chronic) vyadhi. Mandagni is the most prominent causative factor. Consumption of viruddhaahara is the main causative dietary factor of Ekakushtha. Vegadharana and taking anna in ajeernaavastha are the viha-raj causes of Ekakushtha. In group A- out of 15 patients 12 patients were having Aswedanamlakshan of score 2 before treatment, 10 patients were having Mahavastulakshan of score 2 before treatment, 7 patients were having Matsyashkalopamamlakshan of score 3 before treatment, 10 patients were having Kandulakshan of score 2 before treatment, 15 patients were having Rukshatalakshan of score 2 before treatment, In group B- out of 15 patients 12 patients were having Aswedanamlakshan of score 3 before treatment, 5 patients were having Mahavastulakshan of score 1 before treatment, 9 patients were having Matsyashkalopamamlakshan of score 3 before treatment, 10 patients were having Kandulakshan of score 2 before treatment, 9 patients were having Rukshatalakshan of score 2 before treatment. Ingredients of KutajadiTailaviz-Kutaja, Khadir, Asana, Saptaparna, bears Bitter and Astringent taste. Nimba has Bitter, Astringent and Pungent taste. Man-jishtha has Bitter, Astringent and Sweet taste. Aragwadha and NarikeTaila have Sweet taste. Therefore, Taila has especially of Bitter, Astringent and Sweet tastes. Nim- ba Kwatha used in AwagahaSweda has Bitter, Astringent and Pungent taste. Takradhara cures Agnimandya. MahamanjishtadiKwatha is indicated in Kushtha. We say that trial medicines may act on the Sampraptigatakas and symptoms as follows. Bitter taste does Amapachana and Agnipradeepan, as well as pacifies Vitiated Vata and Kapha (i.e. Toxins, impurities). Bitter taste stabilizes Twaka and Mansadhatu and A stringent taste purifies Rakthatu therefore clears shaithilya of dhatu. Astringent taste heals srotas viz Rasa, Rakata, Mansa and Sweda by it’s tighten, curing and drying action on wound. Further stops dosha and dushyasamnurcchana which can be lead tolakshanupashaya. Tak-radhara cures emotional disturbances there by brings tranquility.
to mind and cures Dhatvaagniman- dyā. Mahamanjishtadikwatha is Kushthaghna.

CONCLUSION
There is no significant difference between the effect of Abhyanga, Awagah and Takradhara in Patients of Group A with Abhyanga, Awagah and Takradhara with Internal Medicine in patients of Group B. Reduction in the cardinal signs and symptoms of Ekakushtha (Psoriasis) viz Matsyshakalopamam was found significant in both the group but not significant in Mahavastu and Aswedanam in both the groups. Reduction in the associated signs and symptoms of Ekakushtha (Psoriasis) viz Kan- du and Rukshata was found significant in both the groups.

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REFERENCES
2. Kasture H. S., Ayurvediya Pan- chakarma Vidyan, 5th edition, Great- nag Road, Nagpur-9, Shree Baidyanath Ayurved Bhavan Ltd, 26/01/1997, Page- 121

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