

## 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*, *Mahamanjishtheadikwatha* 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 *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'. **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 *Matsyashakalopamam* 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*, *Mahamanjishtheadikwatha*.

### 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)<sup>1</sup>. It is *Vatakaphapradhana*. *Ekakushtha* is one of the *ShudraKushtha* described in *Ayurvedic Granthas* and it is *Vatakaphaj* in origin. In the modern science,

*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 applica

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*<sup>2</sup>. *Mahamanjishtheadikwath* a<sup>3</sup> is indicated in *Kushtha*. In present era there is no such medicine to cure *Ekakushtha* disease, therefore 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 *Matsyshakalopamam*, *Mahavastu* and *Aswedanam*. 2. Reduction in the associated signs and symptoms of *Ekakushtha* viz *Kandu* and *Rukshata*.

**Hypothesis:** H<sub>0</sub>: 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').

**H<sub>1</sub>:** 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*<sup>4</sup> i) *Kutaja* (*Holarrhenaantidysentrica* Wall.) ii) *Chitrak* (*Plumbagozyllanica* Linn), iii) *Nimba* (*Azardicaindica* Linn.) iv) *Aragwadha* (*Cassia fistula* Linn.), v) *Khadir* (*Acacia catechu* Linn.) vi) *Aasan* (*Bee-*

*jak*) (*Brideliaretusa* Spreng.), vii) *Saptarn* (*Alstoniascholaris* (L.) R. Br. and viii) *Manjishtha*<sup>5</sup> (*Rubiaccordifolia* Linn.). *NarikelTaila*<sup>6</sup> (Coconut Oil) was used for base of the oil, were purchased from Pune 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<sup>th</sup> water remains i.e. 120 litres *kwatha*. 120 Litre *kwatha* and 30 litre of coconut oil were boiled on medium heat till only *Taila* remains and *snehasiddhilakshanas* were observed. *Taila* preparation was done in *Rasashastra* and *Bhaishajyakalpana* Department, BVDU Ayurved College, Pune. Standardization of *KutajadiTaila* was done at B, V, Bhide Lab, Tilak Road, Pune.

#### II) Preparation of *NimbaKwatha*-

*Nimba*<sup>7</sup> (*Azardicaindica* Linn.) was purchased from Pune market and their authentication was done from Department of Botany, Pune University. *NimbaKwath* was prepared 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 hydrometer method for maintaining uniformity. At the time of conducting 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 (CyperusrotundusLinn.)* 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 *Musta-Churna* 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 com-

mittee 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 *Matsyashakalopamam* (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 *Abhyang*, *Awagah* and *Takradhara* as explained by *Charak*

**Assessment Criteria**

Patients were initially assessed on 1<sup>st</sup> day before the treatment was started. Then 2<sup>nd</sup> assessment was done on 7<sup>th</sup> day in group A and group B. Followups were taken on days 30<sup>th</sup> and 60<sup>th</sup> 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) Matsyashaklopamam (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

**(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):**

**Table1: Efficacy Of Lakshana Aswedanam Within The Group Before And After Treatment.**

<i>Aswedanam</i>	POSITIVE RANK	NEGATIVE RANK	TIE	Z VALUE	P VALUE
Group A	0	2	13	-1.4142	0.1573
Group B	0	2	13	-1.3416	0.17971

The p value is  $\hat{A}0.05$  indicating there is no significant result in *Aswedanam* in both the group.

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

<i>Mahavastu</i>	POSITIVE RANK	NEGATIVE RANK	TIE	Z VALUE	P VALUE
Group A	0	2	13	-1.4142	<b>0.1573</b>
Group B	0	2	13	-1.4142	<b>0.1573</b>

The p value is  $\hat{A}0.05$  indicating there is no significant result in *Mahavastu* in both the group.

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

<i>Matsyshakalopamam</i>	POSITIVE RANK	NEGATIVE RANK	TIE	Z VALUE	P VALUE
Group A	0	12	3	-3.2757	<b>0.00105</b>
Group B	0	12	3	-3.2757	<b>0.00105</b>

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.

<i>Kandu</i>	POSITIVE RANK	NEGATIVE RANK	TIE	Z VALUE	P VALUE
Group A	0	13	2	-3.3075	<b>0.00094</b>
Group B	0	14	1	-3.4066	<b>0.00066</b>

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.

<i>Rukshata</i>	POSITIVE RANK	NEGATIVE RANK	TIE	Z VALUE	P VALUE
Group A	0	13	2	-3.5	<b>0.00047</b>
Group B	0	14	1	-3.5568	<b>0.00038</b>

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  $\hat{A}0.05$  indicating not significant result in *Mahavastu* and *Aswedanam* in *Ekakushtha*.

**Efficacy of Abhyanga, Awagaha 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  $\hat{A}0.05$  indicating not significant result in *Mahavastu* and *Aswedanam* in *Ekakushtha*.

**Table No.6: Comparison Of Treatment Efficacy In The Lakshans Between Two Groups**

Parameter	Mean rank groupA	Mean rank group B	Mann Whitney U	Z value	P value
<i>Aswedanam</i>	16.2	14.8	102	-0.521	<b>0.602366</b>
<i>Mahavastu</i>	15.4	15.6	111	- 0.06672	<b>0.946806</b>
<i>Matsyshakalopamam</i>	16.2	14.8	102	- 0.52225	<b>0.601497</b>
<i>Kandu</i>	14.76666667	16.23333333	101.5	- 0.54764	<b>0.583936</b>
<i>Rukshata</i>	14.1	16.9	91.5	- 1.34508	<b>0.178601</b>

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 *viharaj* 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. *Manjishtha* has Bitter, Astringent and Sweet taste. *Aragwadha* and *NarikelaTaila* have Sweet taste. Therefore, *Taila* has especially of Bitter, Astringent and Sweet tastes. *Nimba 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 *Sampraptighatakas* 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 Astringent taste purifies *Raktadhatu* therefore clears *shaithilya* of *dhatu*s. Astringent taste heals *srotas* viz *Rasa, Rakata, Mansa* and *Sweda* by it's tighten, curing and drying action on wound. Further stops *dosha* and *dushyasammurchana* which can be lead *tolakshanupashaya*. *Takradhara* cures emotional disturbances there by brings tranquility

to mind and cures *Dhatvaagniman-dya*.  
*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 *Kandu* and *Rukshata* was found significant in both the groups.

## ACKNOWLEDGEMENT

We thank to Bharati Vidyapeeth Deemed University, Pune-30 (India) for granted us financial support. We thank to BVDU College of Ayurved and BVMF'S *Ayurved* Hospital for provided us all the necessary facilities for the fulfillment of the said valuable research work, we also thankful to Department of *Rasashastra* and *Bhaishajyakalpna* for preparation of *Kutajadi Taila*.

## REFERENCES

1. Shastri Kashinath, Chaturvedi Gorakhnath Dr. Charak Samhita, Reprint, Varanasi Chaukhamba Bharati Akadami, 2001, ChikitsaSthan 7/21.
2. Kasture H. S., Ayurvediya Panchakarma Vidyan, 5<sup>th</sup> edition, Greatnag Road, Nagpur-9, Shree Baidyanath Ayurved Bhavan Ltd, 26/01/1997, Page- 121
3. Parashar Radhakrushna Acharya, Sha-

rangdhar Samhita, 4<sup>th</sup> edition, Greatnag Road, Nagpur-9, Shree Baidyanath Ayurved Bhavan Ltd, November 1994, Page-218

4. Garde Ganesh KrushnaDr, SarthaVagbhata, Mumbai, Gajanan Book Depo, 1983, ChikitsaSthan 19/37, Page No-318.
5. Chunekar K. C. Dr, Pandye G. S. Dr, Bhavprakash Nighantu, 10<sup>th</sup> edition, Varanasi, Chukhamba Bharati Academy, 1995, Verse No-191, Page No-110.
6. Privatsharma Prof, Sharma GuruprasadDr, Kaiadeva-Nighantu, 1<sup>st</sup> edition, Varanasi, Chaukhamba Orientalia, 1979, Gunakarma.
7. Chunekar K. C. Dr. Pandye G. S. Dr, Bhavprakash Nighantu, 10<sup>th</sup> edition, Varanasi, Chukhamba Bharati Academy, 1995, GuduchadiVarg /verse No-94

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Source of support: Nil Conflict  
of interest: None Declared