

## **A Clinical Study on the Role of *Vamana Karma* and *Nimbadi Vati* in the Management of *Ekakushtha* w.s.r. to Psoriasis**

Kuldeep Singh<sup>1\*</sup>, A. J. Ravat<sup>2</sup> and N.P. Joshi<sup>3</sup>

<sup>1,2,3</sup>Dept. of Panchkarma, Government Akhandanand Ayurved college, Ahmedabad, Gujarat, India

### **Abstract**

At the door –step of 21<sup>st</sup> century with a machine like routine, fast-food and fast hectic life of scientifically modernized world human is being confronting with a variety of diseases. This type of food habit, less sleep, stress, pollution accelerates the disturbance in the body especially on the skin. In present era the skin diseases become a major hazard for mental health more than physical as it distribute the cosmetic harmony. Psoriasis is a chronic, non-contagious disease that affects mainly the skin. The cause of Psoriasis is not exactly known, but it is believed to have an autoimmune, genetic component and it can be triggered by a prolonged injury to the skin. Factors that may aggravate Psoriasis include stress, withdrawal of systemic corticosteroid, excessive alcohol consumption, and smoking. There are many treatments available, but because of its chronic recurrent nature Psoriasis is a challenge to treat. Present available treatments have many hazardous effects therefore, to treat it safely and effectively *Vamana* therapy is used. It plays a significant role without any side effects. And we have found very significant result in all parameters of Psoriasis like itching, scaling erythema and thickness of scale and also seen in improvement of sign of Psoriasis like Auspitz ‘sign and Candle Grease sign.

### **Keywords**

*Vamana Karma, Ekakushtha, Nimbadi Vati, Jimutaka, Psoriasis*



**Greentree Group**

Received 08/08/15 Accepted 31/8/15 Published 10/09/15

## INTRODUCTION

The most common skin manifestations of Psoriasis are scaling erythematous macules, papules and plaques. Typically the macules are seen first and these progress to maculopapules and ultimately well-demarcated, noncoherent, silvery plaques overlying a glossy homogeneous erythema<sup>1</sup>.

The following features are pertinent and helpful in the clinical diagnosis of Psoriasis.

- Auspitz sign – When hyperkeratotic scale is mechanically removed from a psoriatic plaque by scratching, within few minutes, small blood droplets appear on erythematous surface (due to dilated and tortuous blood vessels in papillary dermis). However, it is not positive in inverse Psoriasis or pustular Psoriasis on the scalp lesion, even non-psoriatic plaques e.g. of seborrhoeic dermatitis may show a positive Auspitz sign<sup>2</sup>.
- The isomorphic response or Koebner phenomenon, which is occurrence of lesions in areas of trauma, e.g. cuts, surgical wounds, scratch marks and even burns. It indicates actively spreading disease and is most frequently seen in patients with early onset Psoriasis
- Presence of nail pitting, which can aid in diagnosis of the disease.

- Altered pigmentation with lesional clearance.

The cause of Psoriasis is not exactly known, but it is believed to have an autoimmune, genetic component and it can be triggered by a prolonged injury to the skin. Factors that may aggravate Psoriasis include stress, withdrawal of systemic corticosteroid, excessive alcohol consumption, and smoking. There are many treatments available but because of its chronic recurrent nature Psoriasis is a challenge to treat.

*Ayurveda texts* do not give a direct reference towards a single disease which can be compared with the modern day “Psoriasis”. Many entities like “*Kitibha*”, “*Charmadala*” and “*Ekakushtha*” are compared with it.

*Ekakushtha*<sup>3</sup> consists of the signs and symptoms i.e. *Asvedanam*, *Mahavastu* and *Matsyashakalopamam Avastha* which can be compared with Psoriasis and hence it has been taken as the analogue to Psoriasis in the present research work.

*Ekakushtha* is a *VataKapha Pradhan Vyadhi*. *Vamana* is the principle treatment of *Kaphaj Vyadhi*. *Vata* is *yogvahi* i.e. it works according to the accompanying *Doshas* (here *Kapha*).

It is said in the classics that *Vata Pradhana Kustha* should be treated with *Snehana* and *Vamana*<sup>4</sup> is the best procedure for *Kapha Pradhan Kustha*. Because of both *Doshas* are involved in *Ekakushtha*, *Snehana* with *Kaphanashaka Ghrita* and *Vamana* procedure may play a significant role in this disease.

*Acharya Vagbhata* has mentioned one special formulation for *Kaphaj Kustha* i.e. *Nimbadi Ghrita*<sup>5</sup> was used for *Abhyantara Snehana* before *Vamana* to increase its efficacy.

In present study instead of single *Vamana* drug, we have taken combination of *Vamak Dravya* for induction of *Vaman Karma*. For this purpose we selected *Jimutaka, Vacha and saindhava Lavana* in a ratio of 3:2:1. Most of them have *Kaphapitahara* property which is highly useful for *Kaphapradhan vyadhi* like *Ekakushtha* (Psoriasis). After completion of *Vaman Karma*, *Shamana* therapy must be given. So we have selected *Nimbadi Ghrita* for *Shaman* of remaining *Dosha* and in second group for only *Shamana*.

## MATERIALS AND METHODS

### Selection of the patients

Pre-diagnosed patients of Psoriasis, fulfilling the criteria of selection and divided

in two groups randomly irrespective of age, sex, caste, religion, profession etc. from the O.P.D. as well as I.P.D. of Govt. *Akhandanand Ayurveda* College-Hospital, Ahmedabad and Govt. *Shrimati Maniben Ayurveda* Hospital, Ahmadabad were registered in the study.

### Ethical clearance

The present study has been cleared by Institutional Ethics Committee (IEC No. 11, dated 18/02/2014) and written consent of the parents of each patient was taken before starting the treatment. Basic information of the disease and treatment was given to the patients.

### Criteria for selection of patients

1. As per clinical sign and symptoms of *Ekakushtha* (Psoriasis) described in classical *Ayurvedic* text and Modern literature.
2. Age groups: 20-60 years of either sex.

### Criteria for exclusion of patients

1. *Vamana ayogya* as per classical text excluded for study.
2. Patients having complicated diseases like Cancer, T.B., Heart diseases, D.M., H.I.V. Gastric or duodenal ulcer etc.
3. Below 20 year and above 60 year of age.

## Grouping and Posology

**GROUP A:** *Vamana Karma* followed by *Nimbadi Vati*(after *Samsarjana Karma*) for 6 weeks

- **Snehapana:** *Snehapana* with *Nimbadi Ghrita*, 25 ml initial dose with gradual increase up to 3/5/7days as per *Koshtha* and up to *Samyak Snehana Lakshana* obtained.

- **Vamana** was performed by *Jimutaka* (3 part), *Vacha* (2 part) and *Saindhava* (1 part).

- **Shamana:** *Nimbadi Vati*(6gm/day - each Vati-500mg.) was given for 6 weeks.

**Group B:** *Shamana Chikitsa* with *Nimbadi Vati*(6gm/day - each Vati-500mg.) for 8 weeks. Follow up was taken after 4 weeks in both the groups.

## Assessment criteria

A research proforma was designed for the present study and a scoring pattern was adopted for the assessment of clinical trials. The effect of therapy was assessed by counting the scores before and after treatment.

## Parameters

*Asvedanam* (lack of perspiration), *Mahavastu* (area of involvement) (lack of perspiration), *Matsyashakalopamam* (Scaling), *Kandu* (itching), *Krishna Aruna*

*Varna* (erythema) and *Rukshta* (Dryness), *Nidranasha* (disturbed sleep) *Sandhi Shula* , (Joint pain), Scaling frequency *Nakhadusti* (Nail Changes) and Auspitz sign ,Candle grease sign and Koebner's Phenomena .

## Assessment of total effect of therapy

- Cured: 100 % relief in signs and symptoms.
- Marked improvement: More than 75% improvement in signs and symptoms was recorded as marked improvement.
- Moderate improvement: 51% to 75% improvement in signs and symptoms was considered as moderate improvement.
- Mild improvement: 26% to 50% improvement in signs and symptoms was considered as mild improvement.
- No Improvement: Less than 25% reduction in signs and symptoms was noted as unchanged.

## Statistical analysis

Student's "t" test (paired and unpaired) was applied for assessment of the results.

## Selection of procedure and drug

### *Vamana Karma*

*Charaka* has highlighted the role of *PanchaKarma* therapy by stating that the disease treated by *Shodhana* will never recur whereas the treatment with *Shamana*

therapy may recur in due course of time<sup>6</sup>. Ekakushtha is a *Vata-Kapha Pradhan Vyadhi* and *Vamana* is the principal treatment of *Kapha Vyadhi*. *Vata* is *yogvahi* i.e., it functions according to the accompanying *Doshas* (here *Kapha*). So in present study *Vamana Karma* was taken for *Shodhana* process.

#### ***Nimadi Ghrita***

Acharya Charaka mentioned that in *Kushtha*, *Prameha* and *Shotha Snehana* should be done with *Siddha Ghrita*.

In the present study, *Nimbadi Ghrita* was given as *Abhyantara Snehana* in increasing dose from three to seven days for *Samyaka Snehana*. Acharya *Vagbhata* mentioned “*Nimbadi Ghrita*” in the treatment of *Kaphaja Kustha* therefore that was selected for *Abhyantara Snehana* prior to *Vamana* to increase the efficacy of the treatment.

In present study instead of single *Vamana drug*, we have taken combination of *Vamak Dravya* for induction of *Vamana Karma*. For this we used *Jimutaka*, *Vacha* and *Saindhava Lavana* in a ratio of 3:2:1. Most of them have *Kaphapitahara* property which is highly useful for *Kaphapradhan Vyadhi* like *Ekakushtha* (Psoriasis).

#### ***Nimadi Vati***

*Ekakushtha* is *Kapha Vata Pradhana* and *RaktapraDoshaja Vyadhi*. Mainly *Sanga* and *Vimarga Gamana* type of *Srotodushti* was found in *Ekakushtha* patient. In the *Samprapti of Ekakushtha*, *Sanga* is caused by *Kapha Dosha* and *Vimarga Gamana* is caused by *Vata*. Maximum no. of content in *Nimbadi Vatihas Tikta and Katu Rasa*, *Ushana Virya*, *Laghu* and *Ruksha Guna* which all act on *Kapha*. *Tikta and Katu rasa* has properties like *Lekhana*, *Deepana*, *Pachana* and *Kleda Upashoshana* and due to these properties it becomes able to remove obstruction (*Sanga*) of *Kapha* and due to this process, *Vata* becomes channelized and *Samprapti Vighatana* achieved.

## **RESULTS AND DISCUSSION**

Total 30 patients were registered in the present study. Maximum number of patients i.e., 40% belonged to age group of 51-60 yrs. Maximum number of patients i.e., 63.33 % were male, 83.33% patients were Hindu, 86.67% of the patients were married 33.33% were housewives, 60.00% patients were undergraduates ,53.33% were from medium class and 80% were from urban area.

The results of the present study showed that maximum numbers of patients i.e., 76.67%

suffered from Plaque Psoriasis, 56.67% of patients were having the habit of vegetarian diet and most of the patients i.e., 76.67% preferred *Amla Rasa Pradhan Ahara*.

- Maximum no. of patients 56.67% were having *Adhyashan* type of dietary habit, 43.33% had *Vishamagni*, 63.33% were of *Krura Koshta*, 86.67% had day sleeping, 80.00% of the patients had not any physical exercise habit and 53.3% were addicted to tea and/or coffee.
- Most of the patients (6.67%) were having positive family, 53.3% patients were of *Vata Pittaja*, 53.3% of patients were of *Rajasika manasika prukruti*.
- Most of patients (96.66%) were habituated consuming food made mainly from wild barley, *cheenaka* and common millet grains along with milk, curds, butter-milk and 83.33% gave a history of *Vega Dharan* either *Manasik or Sharirika*.
- Most of the patients (73.33%.) showed that *Vata-Kapha Dosh*a involvement and *Tvacha, Rakta Dhatu Dushti, Rasavaha* and

*Raktavaha Dushti* were found in all patients .

- *Mahavastu, Matsyashakalopamam, Kand*u, *Krishna Aruna Varna* and *Rukshta* was found in all the patients (100%) while *Asvedanam* was found in 83.33% of patients.

Disturbed sleep was present in 53.33% patients; Nail changes (i.e., pitting, oil spots) were present in 33.33% patients and joint involvement was found in 30% patients. Auspitz sign was present in 100% patients followed by Candle grease sign in 56.66% and Koebner's Phenomena was found in 10% of patients.

Lower extremity involvement was found in 90% of patients, in maximum no. of patients (86.67%) consumed total quantity of *Nimbadi Ghrita* in a range of 450-840 ml and average quantity of *Vamana yoga (Jimutakadi Vamana yoga)* in 73.33% patients was 10-12 gm, (53.33%) had taken 35-45 min for the induction of first *Vega* and *Vega* quality in 53.33 % of patients non Projectile *Vega*, with the support of *Vamnopaga* was observed.

During *Vamana* procedure clear *Pitta* appeared in 26.67% of patients and *Madhyama Shuddhi* was observed in 53.33% .

## RESULTS

### Effect of therapy:

Statistically highly significant relief ( $p < 0.001$ ,  $p < 0.01$ ) was found in *Mahavastu* (%age relief=46.2%), *Matsyashakalopamam* (%age relief=86.0%), *Krishna aruna varna* (%age relief=53.3%), *Kandu* (%age relief = 69.4%), *Rukshta* (%age relief = 56.0%), *Asvedanam* (%age relief=66.64%), *Nidranasha* (%age relief=53.3%), Candle grease sign (%age relief=95.0%), Auspitz Sign (%age relief = 90.0%), Scaling frequency (%age relief=81.1%), PASI Score (%age relief = 70.4%) and DLQI Score (%age relief=56.8%).

But insignificant results ( $P > 0.05$ ) were found in *Nakhadushti* (%age relief=14.3%), *Sandhishhula* (%age relief=49.8%) and Koebner's phenomena (**Table 1**).

Statistically Highly Significant relief ( $p < 0.001$ ,  $p < 0.01$ ) was found in *Matsyashakalopamam* (%age relief=56.1%), *Krishna aruna Varna* (%age relief = 43.2%), *Kandu* (%age relief = 47.4%), *Rukshta* (%age relief = 37.5), *Asvedanam* (%age relief = 37.5%), *Nidranasha* (%age relief = 33.3%) and Candle grease sign (%age relief=80.0%).

Auspitz Sign (%age relief = 80.0%), Scaling frequency (%age relief=58.7%), PASI Score (%age relief = 44.8%) and DLQI Score (%age relief=32.3%).

Statistically significant relief ( $< 0.05$ ) was found in *Mahavastu* (%age relief = 20.0%) and insignificant results ( $P > 0.05$ ) were found in *Nakhadusti* (%age relief=14.3%), *Sandhishhula* (%age relief=49.8%) and Koebner's phenomena. (**Table 2**)

Follow-up was done after 4 weeks of stopping the active treatment. No further increase in the severity of signs and symptoms was observed in both groups. No adverse effects were reported by any of the patients in any group.

### Overall Effect of Therapy

In Group A, marked improvement was seen in 13.3% patients, moderate improvement was seen in 80.0% patients, mild improvement was seen in 6.7% of patients and no patient was found in unchanged result category. In Group B moderate improvement was found in 40% of patients. Mild improvement was found in 53.3% and 6.7% patients were found in unchanged result category (**Table 3**).

**Table 1** Effects of Therapy on Individual Criteria in Group- A (Paired t test)

S.	Parameters	N	Mean	D	%age	SD ±	SE±	t	P
----	------------	---	------	---	------	------	-----	---	---

No.		BT	AT	Relief						
1.	<i>Asvedanam</i>	15	1.400	0.467	0.933	66.4%	0.961	0.248	3.76	0.002
2.	<i>Mahavastu</i>	15	2.600	1.400	1.200	46.2%	0.775	0.200	6.000	<0.001
3.	<i>Matsyashakalopamam</i>	15	2.867	0.400	2.467	86.0%	0.834	0.215	11.457	<0.001
4.	<i>Krishna aruna varna</i>	15	3.00	1.400	1.600	53.3%	0.632	0.163	9.798	<0.001
5.	<i>Kandu</i>	15	3.267	1.000	2.267	69.4%	0.594	0.153	14.789	<0.001
6	<i>Rukshta</i>	15	2.733	1.200	1.533	56.0%	0.516	0.133	11.500	<0.001
7	<i>Nidranasha</i>	15	1.000	0.467	0.533	53.3%	0.640	0.165	3.228	0.006
8	<i>Nakhadusti</i>	15	0.933	0.800	0.133	14.3%	0.352	0.090	1.468	0.164
9	<i>Sandhishula</i>	15	0.267	0.133	0.133	49.8%	0.516	0.133	1.000	0.334
10.	Auspitz Sign	15	2.000	0.200	1.800	90.0%	0.414	0.107	16.837	<0.001
11.	Candle grease sign	15	1.333	0.066	1.267	95.0%	0.961	0.248	5.104	<0.001
12	Koebner's phenomena	15	0.133	0.00	0.133	100%	0.561	0.133	1.000	0.334
13	Scaling frequency	15	3.667	0.667	3.000	81.1%	0.756	0.195	15.370	<0.001
14	PASI Score	15	23.520	6.960	16.560	70.4%	9.834	2.539	6.522	<0.001
15	DLQI Score	15	14.200	6.133	8.067	56.8%	3.535	0.913	8.838	<0.001

## DISCUSSION

The present work was selected keeping in mind the following points:

### **Problem**

Psoriasis is a today's burning problem because of its Socio - psychological impact, limitation and adverse effects of treatment, chronic nature and recurrence. Therefore,

the study entitled "A Clinical Study on the role of *Vamana Karma* and *Nimbadihati* in the management of *Ekakushtha* w.s.r. to Psoriasis" was undertaken.

There is no direct reference in *Ayurveda texts* towards a single disease which can be compared with the modern day "Psoriasis". Many entities like "*Kitibha*",



“*Charmadala*” and “*Ekakushtha*” are compared with it.

**Table 2** Effects of Therapy on Individual Criteria in Group- B (Paired t test)

S. No.	Parameters	N	Mean		D	%age Relief	SD ±	SE±	t	P
			BT	AT						
1.	<i>Asvedanam</i>	15	1.067	0.667	0.400	37.5%	0.507	0.131	3.055	0.009
2.	<i>Mahavastu</i>	15	2.000	1.600	0.400	20.0%	0.632	0.163	2.449	0.028
3.	<i>Matsyashakalopamam</i>	15	2.733	1.200	1.533	56.1%	0.516	0.133	11.500	<0.001
4.	<i>Krishna aruna varna</i>	15	2.467	1.400	1.067	43.2%	0.594	0.153	6.959	<0.001
5.	<i>Kandu</i>	15	2.533	1.200	1.333	47.4%	0.617	0.159	8.367	<0.001
6.	<i>Rukshta</i>	15	2.133	1.333	0.800	37.5%	0.414	0.107	7.483	<0.001
7.	<i>Nidranasha</i>	15	1.000	0.667	0.333	33.3%	0.488	0.126	2.646	0.019
8.	<i>Nakhadusthi</i>	15	0.267	0.267	0.000	0.0%	0.000	0.000	0.000	1.000
9.	<i>Sandhishula</i>	15	0.600	0.600	0.000	0.0%	0.000	0.000	0.000	1.000
10.	Auspitz Sign	15	2.000	0.400	1.600	80.0%	0.507	0.131	12.220	<0.001
11.	Candle grease sign	15	0.933	0.200	0.733	78.5%	0.884	0.228	3.214	0.006
12.	Koebner's phenomena	15	0.267	0.000	0.267	100%	0.704	0.182	1.468	0.164
13.	Scaling frequency	15	3.067	1.267	1.800	58.7%	0.676	0.175	10311	<0.001
14.	PASI Score	15	18.633	10.287	8.347	44.8%	5.238	1.353	6.171	<0.001
15.	DLQI Score	15	12.400	8.400	4.000	32.3%	2.204	0.569	7.029	<0.001

### ***Disease***

*Ekakushtha* consists of the signs and symptoms (i.e. *Asvedanam*, *Mahavastu*, *Matsyashakalopamam Avastha* and *Krishna aruna Varna*) which can be compared with Psoriasis and hence it has been taken as the

analogue to Psoriasis in the present research work.

### ***Vamana Karma***

*Ekakushtha* is *VataKapha Pradhana Vyadhi* and *Vamana* is a specific therapy for *Kapha Dosha*. *Vamana* drugs which are having

*Ushna, Tikshna, Sukshma, Vyavayi* and *Vikasi* property reaches the *Hridaya* by virtue of its *Virya* then following the *Dhamani*. It spreads in the whole body through large and small *Srotas*. *Vamana* drugs by their property and *Vayu* and *Akasha Mahabhuta* dominancy helps in eliminating the *Dosha* from the *Shakha* to *Koshtha* and then expelling them out from the body through oral route.

### ***Abhyantara Snehana***

#### ***Vamana Dravya***

*Jimutaka* has *Tikta* rasa, *Usna* virya and *Katu* Vipaka and when it is given with appropriate adjuvant, it can cure all diseases<sup>7</sup>.

#### ***Nimadiva***

*Ekakushtha* is *Kapha Vata Pradhana* and *RaktapraDoshaja Vyadhi*. Mainly *Sanga* and *Vimarga Gamana* type of *Srotodushti* was found in *Ekakushtha* patient. In the *Samprapti* of *Ekakushtha*, *Sanga* is caused by *Kapha Dosha* and *Vimarga Gamana* is caused by *Vata*. Maximum no. of content in *NimbadiVati* has *Tikta* and *Katu* Rasa, *Ushana* Virya, *Laghu* and *Ruksha* Guna which all act on *Kapha*. *Tikta* and *Katu* rasa has properties like *Lekhana*, *Deepana*, *Pachana*, *Kleda Upashoshana* by which it becomes able to removing obstruction

(*Sanga*) of *Kapha* and due to this process, *Vata* becomes channelized and *Samprapti Vighatana* will be achieved.

Among the contents of *Nimbadi Vati*, (**Table.4**) most of the contents are useful to pacify the vitiated *Kapha*. On other hand drugs have *Kushthagna*, *Kandughna*, *Krimighna*, *Kaphanashaka* properties which directly act on *VataKaphaja kustha* i.e., *Ekakushtha*.

### ***Results***

*Asvedanam* occurs due to the obstruction of *Svedavaha Srotas* i.e., *Sanga* which is due to *Kapha Dosha*. This is relieved by *Vamana Karma* having *Kapha Shodhaka* property. Therefore, more percentage of relief is found in Group A.

In *Kushtha* disease generally all the three *Dosha* are involved and due to which *Vamana Karma*, *Pitta* and *Kapha* were removed therefore better results were found in Group A.

Scaling is also called hyperkeratinisation which is due to vitiation of *TriDosha*. *Vata* increases rate of cell division, *Pitta* increases the enzymatic processes in cell and *Kapha* due to *Snigdha* and *Pichchhila* Guna produces smooth scales. *Snehana* pacifies *Vata Dosha* and *Vamana* remove mainly *Apakva Pitta* and *Kapha Dosha*.

Ghrita is *Varnya* so it maintains normal colour of skin and *Vamana* removes *Apakva Pitta* Dosha. *Varna* is also associated with *Pitta Dosha* therefore better result come in group A.

*Kandu* is a symptom mainly caused by vitiated *Kapha Dosha*. *Acharya Charaka* quoted if *kushtha* is *Kapha* predominant then *Vamana* is the best treatment. *Vamana* may be responsible for relief in *Kandu* due to vitiated *Kapha Dosha excretion*.

*Rukshtha* is a symptom mainly caused by vitiated *Vata Dosha*. *Acharya Charaka* quoted that *Sarpipana* is the first line of treatment of *Vata*.

Scaling is due to vitiated *Vata and Nimbadi Ghrita* pacify *Vata Dosha* due to *Snehana* so scaling slow down more in group A .

PASI Score shows the overall effect of therapy and in Group A both vitiated *Vata and Kapha* were pacified more effectively due to the effect of *Snehana ,Vamana and Nimbadi*. So PASI Score showed more result in group A .

DLQI Score shows the overall effect of therapy and in Group A both vitiated *Vata*

and *Kapha* pacify more effectively due to effect of *Snehana ,Vamana and Nimbadi*. So DLQI Score showed more result in group A.

**Table 3** Comparison of Overall Effect of Therapy in Both Groups

Results	Group A (n=15)		Group B(n=15)	
	No. of Patients	%age	No. of Patients	%age
Cured	0	0.0%	0	0.0%
Markedly Improved	2	13.3%	0	0.0%
Moderately Improved	12	80.0%	6	40.0%
Mildly Improved	1	6.7%	8	53.3%
Unchanged	0	0.0%	1	6.7%

## CONCLUSION

Thus, it can be concluded that *Vamana Karma* using *Nimbadi Ghrita* followed by *Shamana* therapy with *Nimbadi Vatiis* is the best choice of treatment of *Ekakushtha*. Although, both therapies are effective in relieving signs and symptoms of *Ekakushtha*, in present clinical study statistically significant difference was observed between two therapies and reflects that Group A is better than Group B.

**Table 4 Showing the Contents of *Nimbadihati***

<i>Dravya</i>	<i>Rasa</i>	<i>Guna</i>	<i>Virya</i>	<i>Vipak</i> <i>a</i>	<i>Doshag-</i> <i>Hnata</i>	<i>Karma</i>
<i>Nimba</i>	<i>Tikta, Kasaya</i>	<i>Laghu</i>	<i>Sita</i>	<i>Katu</i>	<i>Kaphapitah</i> <i>ara</i>	<i>Kaphaghna, Raktasodhaka,</i> <i>Kusthaghna</i>
<i>Saptaparna</i>	<i>Tikta, Kasaya</i>	<i>Laghu, Snigha</i>	<i>Usna</i>	<i>Katu</i>	<i>Kaphapitah</i> <i>ara</i>	<i>Kusthaghna, Udarda</i> <i>Prashamanam</i>
<i>Chitaraka</i>	<i>Katu</i>	<i>Laghu, Ruksha,</i> <i>Tikshna</i>	<i>Usna</i>	<i>Katu</i>	<i>Kaphavatas</i> <i>hamak</i>	<i>Lekhniya, Deepniya</i> <i>Kaphaghna, Jvraghna</i>
<i>Kustha</i>	<i>Tikta, Katu, Madh</i> <i>ur</i>	<i>Laghu, Ruksna,</i> <i>Tiksna</i>	<i>Usna</i>	<i>Katu</i>	<i>Kaphavatas</i> <i>hamak</i>	<i>Lekhniya, VataKapha</i> <i>Shamak Kusthaghna,</i> <i>Kaphanisaraka</i>
<i>Maricha</i>	<i>Katu,</i>	<i>Laghu, Tiksna,</i>	<i>Usna</i>	<i>Katu</i>	<i>Kapha-</i> <i>Shamaka</i>	<i>Deepana, Rochana,</i> <i>Kaphanisaraka</i>
<i>Vacha</i>	<i>Katu, Tikta</i>	<i>Laghu, Tiksna</i>	<i>Usna</i>	<i>Katu</i>	<i>Kaphavata</i> <i>Shamak</i>	<i>Lekhniya, Krimihara,</i> <i>, Vibandhahara</i>
<i>Shal</i>	<i>Kashaya</i>	<i>Ruksha</i>	<i>Seeta</i>	<i>Katu</i>	<i>Kaphapita</i> <i>Shamak</i>	<i>Vranaropaka, Kapha</i> <i>Nisaraka, Kusthagna</i>

## REFERENCES

1

. Psoriasis A CLOSER LOOK, First Edition 2014, Editor Jayakar Thomas, Japee Brothers Medical Publishers (P) Ltd. ISBN 978-93-5152-123-5 Page No.14

2. Step by step Psoriasis Management, first edition 2012, written by Neena Khanna and Trilok Raj Tejasvi, Japee Brothers Medical Publishers (P) Ltd. ISBN 978-93-5025-126-3 Page No.22

3. *Charaka Samhita - Ayurveda Dipika* Commentary of *Chakrapanidatta*, edited by *Vaidya Yadavaji Trikamji Acharya*, Chaukhamba Sanskrit Sansthana Varanasi , Edition reprint 2011, *Chikitsa Sthana* 7/21

4. *Charaka Samhita - Ayurveda Dipika* Commentary of *Chakrapanidatta*, edited by *Vaidya Yadavaji Trikamji Acharya*, Chaukhamba Sanskrit Sansthana Varanasi , Edition reprint 2011, *Sutra Sthana* 25/40

<sup>5</sup>. *Ashtanga Hridaya* with the commentaries *Sarvangasundara* of *Arundatta* and *Ayurveda Rasayana* of *Hemadri*, edited by Pandit Hari Sadasiva Sastri Paradakara Bhisagacharya; Chaukhamba Orientalia, Varanasi, Reprint -2010, *Nidana Chikitsa Sthana*.19/11)

6. *Charaka Samhita - Ayurveda Dipika* Commentary of *Chakrapanidatta*, edited by *Vaidya Yadavaji Trikamji Acharya*, Chaukhamba Sanskrit Sansthana Varanasi , Edition reprint 2011, *Shutra Sthana* 16/20

7. *Charaka Samhita - Ayurveda Dipika* Commentary of *Chakrapanidatta*, edited by *Vaidya Yadavaji Trikamji Acharya*, Chaukhamba Sanskrit Sansthana Varanasi, Edition reprint 2011, *Kalpa Sthana*.2/4