

CLINICAL STUDY TO EVALUATE THE EFFECT OF VAMANA KARMA AND
VIDANGADI MODAKA IN THE MANAGEMENT OF EKAKUSTHA WSR PSORIASIS¹Dr. Priyanka Ahitan and ^{2*}Dr. Anil Bhardwaj¹P.G. Scholar (Deptt. of Panchkarma) R.G.G. P G. Ayu. College Paprola.²Sr. Lectt. Dept. of Panchkarma R.G.G. PG. Ayu. College Paprola.

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ABSTRACT

Every scientific investigation in the field of medical science on drug evaluation has to pass the stage of clinical study, before being declared to be therapeutically valuable. In-vitro and in-vivo experimental studies cannot establish their effectiveness unless and until they can cure the diseased man for which they have been tested. This is only possible by scientific clinical study. Among various skin diseases one soul harrowing disease is *Ekakushtha*. *Ekakushtha* can be correlated with Psoriasis on the basis of similarity in symptomatology. Psoriasis is a non infectious, chronic inflammatory disease of skin. Remission, relapse and seasonal variation are seen in *Ekakushtha* which are also present in psoriasis. In modern medicine there is no definite treatment for this disease. The unique treatment modality of *Ayurveda* provides long lasting results and better life to patients through its three basic principles of treatment i.e. *Shodana, Shaman and Nidanparivarjan*. Current treatment modalities have their own limitations and the drugs have considerable side effects when used for a longer period. Hence it is time to find out safe and effective treatment for Psoriasis and here *Ayurveda* plays an important role. The present abstract reviews the concept of psoriasis in *Ayurveda* and role of *Panchkarma* in the management of psoriasis.

KEYWORDS: *Shodana, Shaman and Nidanparivarjan*.

INTRODUCTION

All the skin diseases in *Ayurveda* have been discussed under the broad heading of “*Kustha*”, which are further divided in to *Mahakustha* & *Kshudrakustha*. *Ekkushta* is considered as *Kshudrakustha*. *Acharyas* have described that all *Kustha* have *Tridoshika* involvement, but the type of *Kustha* depends on predominance of particular *Dosha*. *Ekakushtha* can be correlated with psoriasis on the basis of similarity in etiopathogenesis & symptomatology. Psoriasis is a non-infectious, chronic inflammatory disease of skin, characterized by well-defined erythematous plaques with silvery white scales, with a predilection for the extensor surfaces and scalp & a chronic fluctuating course. The clinical observation of Psoriasis shows that it is a disease with frequent relapses. *Ekakushtha* can be correlated with psoriasis on the basis of similarity in etiopathogenesis & symptomatology. It is one among the *Kshudra Kustha* which has dominance of *Kapha* & *Vata Dosha* in particular and *Rakta* in general is vitiated in its pathogenesis. Classics also emphasize on repeated *Shodhana* in *Kustha*. *Vamana Karma* is first measure amongst *Panchkarma* and has been considered as the best line of treatment for *Kaphaja* disorders. Out of all *Panchkarma* procedures, *Vamana Karma* is the chiefly advocated purificatory measure, so it was taken in the present study for treatment purpose. As per

Ayurvedic principles *Vamana Karma* is not a mere stomach cleansing procedure, it has systemic effects also. *Ekakushtha* is a *Vata- Kaphaj* predominant *Tridoshaja Vyadhi*. For the purpose of *Shamana Chikitsa* “*Vidangadi Modaka*” was selected. All the drugs in this *Yoga* are with *Vatakapha Shamaka* properties and *Ekakushtha* is also a *Vata-Kapha Pradhan Vyadhi*.

Aims and Objectives of the Research work

1. To explore *Ayurvedic* and Modern literature pertaining to *Ekakushtha* and Psoriasis respectively.
2. To assess the efficacy of *Vamana Karma* in *Ekakushtha*.
3. To assess the efficacy of *Vidangadi Modaka* in *Ekakushtha*.
4. To develop effective *Ayurvedic* treatment for *Ekakushtha*.

MATERIAL AND METHODS

1. **Conceptual Study:** Detailed review of conceptual study is done on ‘*Ekakushtha*’ (Psoriasis) from available ancient and modern literature. Detailed literary review of trial drugs and research work done in the past in various institute is reviewed and compiled.

2. Clinical study: Clinical Study is the main component of present research work. Present study is carried out to evaluate the clinical profile of patients suffering from *Ekakushtha* w.s.r. Psoriasis, to assess the effectiveness of *Vamana Karma* and *Vidangadi Modaka* in its management. Patients with classical signs & symptoms of the *Ekakushtha*, according to *Ayurvedic* classics as well as modern science were selected from the O.P.D. & I.P.D. of R.G.G.P.G. Ayu. College & Hospital, Paprola (Kangra) H.P.

Criteria for selection of patients

1. Inclusion Criteria-Patients willing for trial were included in the study after obtaining detailed informed consent. Age Group- 20- 70 years irrespective of sex, education, religion, socioeconomic status etc. Patients with signs and symptoms of *Ekakushtha* (Psoriasis). Written informed consent of the patients was obtained before inclusion in trial.

2. Exclusion criteria -Patients not willing for the trial. Patients below 20 and above 70 years. Patients suffering from peptic ulcers, cardiac disease and any infectious diseases. Patients already taking chemotherapy, radiotherapy. Pregnant and lactating women. Patients allergic to the trial drugs.

Grading for Assessment

1. *Aswedanam* (Anhydrosis).

Symptom	Grade
Normal Sweating	0
Mild Sweating	1
Mild Sweating after exercise	2
No Sweating after exercise	3

2. *Mahavastum* (Extent of lesion).

Symptom	Grade
No Lesions on body	0
Lesions on elbow, knee, lumbosacral, scalp	1
Lesions on forearm, leg, neck, scalp, trunk, back	2
Lesions on most parts of body	3
Lesions on whole body	4

3. *Matsyashaklopanam* (Scaling).

Symptom	Grade
No Scaling	0
Mild scaling by rubbing or itching from lesion	1
Moderate scaling by rubbing or itching from lesion	2
Severe scaling by rubbing or itching from lesion	3
Severe scaling without itching	4

Grouping -The present study was carried out in a single group of 10 patients.

Duration of Study: 45 days

Follow up: After every 15 days

Plan of Study

- *Snehapana* - for 5-7 days
- *Sarvang Abhayanga and Swedana* – for 3 days. On the last day of *Snehapana*, on the Rest day and on the day of *Vamana Karma*.

Vamana Karma with Vamana Kalpa

- *Ikshwaku Churna- Antarnakhmushti* of patient (15-20gm)
- *Saindhava* - 10-20gm
- *Madhu* - 50-100gm

Followed by *Samsarjana Krama* as mentioned in *Shodhana* process.

Shamana Aushadha –Vidangadi Modaka is given to the patient in the dose of 3gm thrice daily for 30 days with the follow up after every 15 days.

4. *Krishna Aruna Varna* (Erythema).

Symptom	Grade
Normal color	0
Faint or near to normal	1
Light reddish color	2
Moderate red color	3
Bright red color	4
Dusky to deep red color	5

5. *Kandu* (Itching).

Symptom	Grade
No Itching	0
Mild/Occasional Itching	1
Moderate(tolerable)Infrequent	2
Severe Itching Frequently	3
Very severe Itching Disturbing	4

6. *Candle Grease sign*.

Sign	Grade
Absent	0
Present	1

7. *Auspitz's sign*.

Sign	Grade
Absent	0
Present	1

8. *Koebner phenomena*.

Sign	Grade
Absent	0
Present	1

9. **Psoriasis Area and Severity Index (PASI)**

It combines the assessment of the severity of lesions and the area affected in to a single score.

Calculation

1. Area of Involvement- The body is divided in to four sections -Head (10% of a person's skin), arms (20%), trunk (30%) and legs (40%). Each of these areas is scored and then four scores are combined in to final PASI score.
2. Within each area the severity is estimated by three clinical signs: Erythema, induration and desquamation.

Criteria for the assessment of overall effect of the therapies

The total effect of the therapy was assessed considering the overall improvement in signs and symptoms. For this purpose, following categories were maintained.

1. Cured: 100 % relief in signs and symptoms.
2. Marked improvement: More than 75% improvement in signs and symptoms was recorded as marked improvement.

3. Moderate improvement: 51% to 75% improvement in signs and symptoms was considered as moderate improvement.
4. Mild improvement: .26% to 50% improvement in signs and symptoms was considered as mild improvement.
5. No Improvement: Less than 25% reduction in signs and symptoms was noted as unchanged.

Statistical Analysis

The information collected regarding demographic data is shown in percentage. The scores of assessment criteria were analyzed statistically in form of mean score B.T. (Before treatment), A.T. (After treatment), (B.T. - A.T.) difference of mean, S.D. (Standard Deviation), S.E. (Standard Error). Signed Rank Test for subjective parameters and Students Paired 't' test for objective criteria is carried out at $p > 0.05$, $p < 0.01$ and $p < 0.001$.

The results are shown as significant or insignificant depending upon p value.

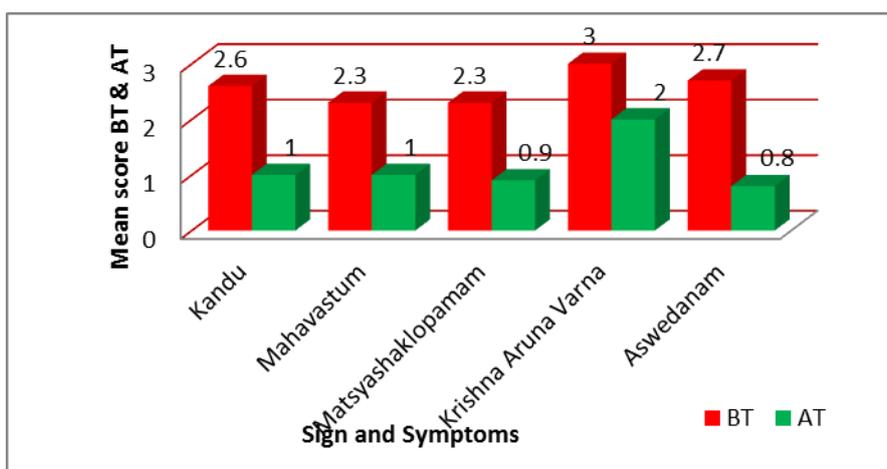
- $P > 0.05$ - Non significant result
 $P < 0.05$ - Significant
 $P < 0.01$ and $P < 0.001$ - Highly significant

Effect of Therapy

In the present study 10 patients were registered and all completed the trial. The clinical data and effect of therapy on 10 patients is presented here.

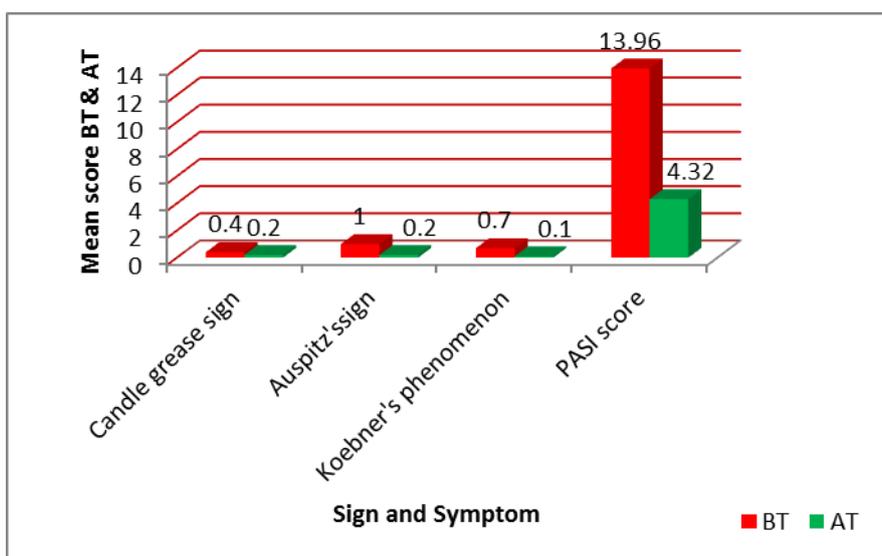
Effect of therapy on Subjective Criteria.

Parameters	N	Mean		D	%age Relief	SD ±	SE±	W	P
		BT	AT						
<i>Kandu</i>	10	2.6	1.0	1.6	61.53	0.568	0.18	47.00	<0.05
<i>Mahavastum</i>	10	2.3	1.0	1.3	56.52	0.85	0.269	45.00	<0.01
<i>Matsyashak-lopamam</i>	10	2.3	0.9	1.4	60.86	0.516	0.163	36.00	<0.01
<i>Krishna Aruna Varna</i>	10	3.0	2.0	1.0	33.33	0.316	0.1	38.00	<0.05
<i>Aswedanam</i>	10	2.7	0.8	1.9	70.37	0.568	0.18	55.00	<0.01



Effect of therapy on Objective Criteria.

Parameters	N	Mean		D	%age Relief	SD ±	SE±	T	P
		BT	AT						
Candle Grease Sign	10	0.4	0.2	.2	50	0.632	0.2	10.00	>0.05
Auspitz's Sign	10	1.0	0.2	0.8	80	0.422	0.133	6.000	<0.001
Koebner's Phenomenon	10	0.7	0.1	0.6	85	0.516	0.163	3.674	<0.001
PASI Score	10	13.96	4.32	9.62	68.91	6.909	2.185	4.412	<0.001



Analysis of above table reveals following points

Statistically highly significant %age change ($p < 0.001$) was found in *Aswedanam* (%age change=70.37%), *Auzpit Sign* (%age change =80%) and *PASI Score* (%age change =68.912%). Significant change ($p < 0.05$ and $p < 0.01$) found in *Kandu* (%age change =61.53%), *Mahavastu* (%age change=56.52%), *Matsya shakalopamam* (%age change= 60.86%), *Krishna aruna varna* (%age change = 33.33%), *Koebner Phenomenon* (%age change= 85%), and insignificant results ($p > 0.05$) was found in *Candle Grease Sign* (%age change = 50%).

Overall Effect of Therapy

Out of total 10 patients, 6 patients (60%) showed marked improvement i.e. more than 75 % improvement in signs and symptoms and 3 patients(30%) showed moderate improvement i.e. the relief in between 51% to 75% whereas only one patient(10%) showed mild improvement i.e relief in between 25 to 50%.

DISCUSSION

- Mode of Action of Vamana Karma**
- Systemic action:** *Doshas* are brought to *Kostha* through *Snehana* & *Swedana*, from there they are eliminated by *Vamana*, which suggests action throughout the body. They also act as an irritant to gastric vagal receptors, and recruit efferent parasympathetic reflexes that cause glandular exocytosis of a less viscous mucus mixture. This action flush tenacious, congealed mucopurulent material from obstructed *Strotas*.
- Local action:** Locally mild inflammation occurs which is transient due to *Ushna* & *Tikshna* peoperties of drugs which irritates the intestinal mucosa. Hence hyperaemia results due to arteriolar & capillary dilatation & also exudation of protein substances which helps in dilution of toxins.

During vomiting when one administers a large amount of decoction of *Vamanopaga Dravya* afterwards *Vamaka Yoga*, this causes irritation in the gastric mucosa again and again to produce vomiting. It scraps mucosal layer over gastric mucosal surface, which stimulates a cascade of several steps by the defense mechanism of body, to protect further damage through mean of inflammation as follows:

- Release of chemical substances from damaged tissues that activate inflammatory process chemicals such as histamine, bradykinin, prostaglandins, proteolytic enzymes and leukotrienes.
- There will be an increased blood flow in that area.
- Leakage of large quantities of pure plasma out of capillaries into damaged areas.
- Infiltration of the area by leukocytes.

Thus, these types of changes may compel cortisol to be secreted in large amount during the process of vomiting. Actually cortisol is secreted to achieve immediate effect of blocking most of the factors that are promoting the

inflammation. But in addition the rate of healing is enhanced" (P. 964, Guyton and Hall, 1996).

Mode of Action of Vidangadi Modaka

As this is a preparation from *Trifla*, *Vidanga*, *Shuddha Langali*, *Pippali*, *Bakuchi*, *Varahikanda*. Majority of the drugs are having the properties of *Kusthaghna*. These drugs are of *Katu*, *Tikta* and *Kashaya Rasa*, *Ushna Virya*, *Laghu*, *Ruksha* and *Tikshana Guna* and *Katu Vipaka*.

Samprapti Vighatana

- On the basis of Rasa:** *Tikta*, *Katu* and *Kshaya Rasa* are present in maximum drugs. *Tikta Rasa* has, *Kledashoshaka* and *Chedana* properties. (*Su.Su43/16*), (*Ch. Su. 26/43*) *Katu Rasa* has *Kaphashamaka*, *Srotovispharaka* (clears the obstruction in channels), *Kandughna* and *Jantughna* properties. By virtue of these properties *Katu* and *Tikta Rasa* will pacifies the vitiated *Kapha* and facilitates the process of *Srotosodhana*. These properties helps in reducing *Kandu*.
- On the basis of Veerya:** Maximum drugs are *Ushnavirya*. *Ushnavirya* has *Vatakaphashamaka* properties and also causes *Kledavishyandana*.
- On the basis of Vipaka:** The drug has *Madhura* and *Katu Vipaka* and it is said to be *Vatashamaka*.
- On the basis of Guna:** Maximum contents have *Laghu*, *Tikshna* and *Ruksha Guna*. *Laghu* and *Tikshna Guna* acts on vitiated *Kapha*. It helps in reducing scaling. In nut shell, *Ushna Viryatva*, *Laghu*, *Tikshna Guna* of drug are helpful in removing the obstruction of the *Srotasa* by decreasing the *Picchila Guna* of *Kapha* and facilitating the process of *Kapha Vishyandana*. It results in clearing up of the obstruction caused by vitiated *Kapha*. *Ushna Virya* and *Madhura Vipaka* work for the *Vata Shamana*. *Vishaghna*, *Kandughna* and *Jantughna* property removes the local infection, thus help in cessation of the further process of inflammation.

CONCLUSION

In the present research work on the basis of facts, observations and result of clinical study, the following things can be concluded:

- The disease *Kushtha* is prevelant since the age of *Vedas*.
- *Acharya Charaka* has advocated the use of *Samshodhana* and *Samshamana*; whereas *Acharya Sushurta* has emphasized the repeated use of *Vamana*, *Virechana*, *Nasya* and *Raktamokshana* in the treatment of *Ekakushtha*.
- *Ikshwaku* is the drug of study for *Vamana Karma*.
- Marked improvement was found in 60 % patients.
- Moderate improvement was found in 30% patients.
- Mild improvement was found in 10 % patients.

- Thus, it can be concluded that *Vamana Karma* and *Vidangadi Modaka* both are effective in reliving signs and symptoms of *Ekakushtha*.

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