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## A Clinical Study to Assess the Efficacy of *Vamana Karma* using *Kutajaphaladi Yoga* in Psoriasis

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### ABSTRACT

Vamana karma is one among the panchakarma therapy considered as the best therapy for the elimination of vitiated kapha and kapha samsrista dosha. Psoriasis is a long standing auto immune disease characterized by patchy skin lesions which is typically red in colour associated with itching and scaling. Psoriasis with its signs and symptoms has similarities with kapha pradhana kusta. In this present clinical study, Kutajaphaladi yoga was used to assess the efficacy of vamana karma in Psoriasis. Assessment of psoriasis was done with 'psoriasis area severity index' (PASI), Auspitz sign & Candle grease sign. This study showed statistically significant result with reduction in PASI score ( $P < 0.000$ ). The study concluded that Kutajaphaladi yoga was effective in the management of psoriasis. More researches on comparison are needed to be conducted with other emetic drugs of higher safety and efficacy.

### KEYWORDS

*Kutajaphala, Psoriasis, Vamana karma, PASI score*



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## INTRODUCTION

*Vamana Karma* is one of the *Panchakarma* considered to be *paramaushadha* in the disorders pertaining to *kapha dosha*. It is considered to be the choice of treatment for several *kaphaja vyadhi* such as *Shwasa*, *Kasa*, *Hrullasa*, *Pinasa*, *Ajeerna*, *Kushta*, etc. In our classics, varieties of skin disorders are collectively mentioned under the broad heading of the disease “*Kushta*”. Any disorder which has *bahudoshavastha* and is predominantly exhibiting dominance of *kapha dosha* can be the best indication for *Vamana karma* provided the recipient is not having any contraindicated conditions. As long as the widest indication of *Vamana karma* is concerned, *kushta* is one of the diseases which suit into *Vamana karma* undoubtedly as it has multiple causative factors with wide manifestations along with chronicity and lingering nature. Hence better management of *kushta* is understood from the predominance of *kapha* and *kapha* associated with *pitta dosha*. Also the extent and nature of involvement of the skin lesions in *kapha sthana* such as the lesions involving the *urdhwa bhaga* of the *shareera*, there is an applicability of *Vamana karma* which is highlighted in the classics. The features such as *aswedana*, involving large body surface area and skin appearing like that of *matsya shakala*, deep seated lesions are all explained under the

category of *vata kapha* variety of *kshudra kushta*. In this regard *Eka Kushta* and *Mandala Kushta* were considered under Psoriasis.

Psoriasis is defined as chronic recurrent inflammatory skin disease characterized by circumscribed erythematous, dry patches of various sizes covered by silvery white scales. The reported prevalence of psoriasis in countries ranges between 0.09-11.43% which will be a serious global issue with at least 100 million individuals affected worldwide. In India, it is found that the incidence of psoriasis amongst patients of skin disorders ranges between 0.44-2.2% with overall incidence of 1.02%. As far as the treatment availability in contemporary science is concerned, they are more aiming towards suppression of immunity along with symptomatic approach towards the concerned patients, whereas our science has the beautiful and effective way of approach in terms of detoxification from the cause and root of the origin of the disease which is broadly highlighted as *shodhana chikitsa*. Considering the gravity of the problem in tackling such lingering disease effectively, the clinical study has been undertaken to assess the effect of *vamana karma* in psoriasis under the title: The clinical study to assess the efficacy of *vamana karma* using *kutajaphaladi yoga* in psoriasis.



## MATERIALS AND METHODS

### 1. SOURCE OF DATA:

Patients who were attending the OPD and IPD of Sri Dharmasthala Manjunatheshwara Ayurveda hospital Udupi, fulfilling the inclusion criteria were incorporated in this study.

### METHOD OF COLLECTION OF DATA:

Twenty patients diagnosed with Psoriasis presented with *kapha pradhana lakshana* in the age group of 16-70 years, of either gender, were selected and subjected to clinical trial. The detailed proforma was prepared considering the points pertaining to history, signs, symptoms and examinations as mentioned in *Ayurvedic* classics and in allied science to confirm the diagnosis. All the registered patients were examined clinically based on their subjective and objective parameters also by considering the PASI score.

### 2. INCLUSION CRITERIA:

- Patients presenting with diagnostic criteria.
- Patients aged between 16 to 70 years.
- Patients who are fit for *Vamana Karma*.

### 3. EXCLUSION CRITERIA:

- Any other systemic disorders like Diabetes mellitus, Hypertension
- Acute infectious conditions of psoriasis such as pustular psoriasis.

- Psoriasis with dominance of *pitta* and *vata dosha*.

- Patients who are unfit for *vamana karma*.

### 4. STUDY DESIGN:

It is an open label clinical study with pre-test and post-test design.

### 5. DURATION OF STUDY:

- *Deepana* and *Pachana* medicines were administered till the appearance of *nirama laxana*.

- *Snehapana* with *Nimbadi ghrita* was administered minimum for a period of 4 days and maximum for a period of 5 days.

- *Vishrama kala* was considered for one day which includes *bahya snehana* and *swedana* followed by oral administration of *kapha utkleshakara ahara*. *Vamana karma* after performing *bahya snehana* and *swedana* was scheduled on 2<sup>nd</sup> day of *vishrama kala*.

- *Peyadi samsarjana krama* was advised for minimum for 3 days and maximum for a period of 7 days according to the *shuddi laxana* obtained in the patient.

- Duration of the study: 11 days to 23 days

- Duration of follow up: After 7 days of completion of the treatment.

- Total duration of study: maximum for a period of 18-30days.

### 6. INTERVENTION :

#### POORVA KARMA:



### A. *Amapachana*

Amapachana was administered with chitrakadi vati 2 tablets (each tablet having a strength of 400 mg) three times a day for a period of 3 days with ushna jala as anupana half an hour prior to the food was administered to all registered patients.

### B. *Snehapana with Nimbadi ghrita*

#### Method of Snehapana:

- The patients were administered with *snehapana* in *arohana krama* using *Nimbadi ghrita* starting with an initial dose of 50 ml. around 6.00 AM (immediately after sun rise) after hot water bath along with *ushna jala* as anupana.
- Soon after the administration of ghrita, patients were advised to gargle the throat with hot water for the purpose of *asya upalepa shuddi*. (AH Su 16)
- All the patients were advised to take *ushna jala* as *anupana* repeatedly till the onset of appetite.
- Daily the dose of the *ghrita* was gradually increased on the basis of time taken for the digestion of *ghrita* which was calculated on the basis of *agni bala* index. The continuation and the cessation of the *snehapana* was done till the appearance of *samyak snigdha laxana*.
- *Jeeryamana lakshana* and *jeerna lakshana* of *sneha* were assessed and recorded every day.

- Features of *samyak snigdha lakshana* were observed and monitored as well as recorded accordingly.

- Meanwhile all the patients were advised to avoid excessive exposure to wind, sunlight, emotional disturbances, excessive heavy work, excessive talking, laughing, standing etc.

- Patients were advised to take the rice gruel whenever the appetite starts to appear after the complete digestion of *ghrita*.

- After observing *samyak snigdha lakshana* in the patient *snehapana* was stopped and the further procedure was continued.

### II. Duration of *snehapana*

✚ *Snehapana* was advised till the appearance of *samyak snigdha laxana*. In the present study, minimum days for the *snehapana* was 4 days and the maximum days for the completion of *snehapana* was 5 days.

### III. Assessment of *snehapana*

#### 1. Dose, Duration of *Sneha jeerna*.

- ✚ Time of *sneha* administration

- ✚ *Sneha matra*

- ✚ Time of onset and duration of *snehajeerna lakshana* like *shiroruk, bhrama, nishteeva, sada, arati* and *klama* etc were monitored and recorded every day.

#### 2. *Samyak snigdha lakshana*



✚ *Vatanulomana* was assessed by the normal expulsion of the flatus, faeces and urine.

✚ *Deeptagni* was considered daily based on the time taken for the digestion of *sneha* with a given *matra* in the patient.

✚ *Asamhata varchas* was noted based on the loose consistency of the faeces.

✚ *Snigdha varchas* was confirmed by greasy/ sticky/ pasty stool, floating of faeces over water. Also it was assessed through the feeling of oiliness over the fingers on washing after defecation.

✚ *Twak snigdhatta* was considered by assessing the greasiness through the touch, luster and texture of the skin before, during and after *snehana*.

✚ *Glani* - It was assessed by presence of exhaustion / fatigue / debility or weakness.

✚ *Anga laghava* was assessed by enquiring about lightness of the body.

✚ *Snehodvega* was confirmed by the presence of aversion towards *sneha*.

### **C. Abhyanga with Karanja Taila**

➤ Patients were subjected to *abhyanga* with *Karanja taila* for about 30 minutes the very next day after the cessation of *snehapana* and on the day of *vamana karma* also. Like this, all the registered patients were administered with *abhyanga* for 2 days only.

### **D. Parisheka with Karanja patra Kashaya**

#### **I. Parisheka Method**

➤ After *Abhyanga* with *Karanja taila*, patients were subjected to *parisheka* with *Karanja patra kashaya* for a period of 2 days only.

#### **II. Duration of parisheka sweda based on assessment of samyak swinna lakshana**

➤ The assessment of *samyak swinna laxana* was done till the patient felt profuse perspiration especially sweating over forehead, later they were advised to take the rest for a while and advised to take hot water bath after cessation of perspiration.

### **E. Administration of Kaphotkleshakara Ahara**

➤ On the previous day of *vamana*, patients were instructed to consume 1 L of curd, sweet preparations made out of milk and edibles made up of black gram. If patients were non vegetarian then they were allowed to consume fish curry also along with curd rice.

#### **F. Counselling:**

➤ Just on the previous day of *vamana karma* in the evening, each patient explained about the procedure as well as counselled to develop courage during *vamana karma*.

➤ All the patients were instructed to complete the daily regimen in terms of



voiding the natural urges and later *abhyanga* followed by *swedana* was performed. Then all the patients were advised to be in empty stomach.

➤ **PRADHANA KARMA:**

➤ **A. Vamaka yoga:**

➤ The *vamaka yoga* in the present study consists of *Kutajaphala*, *madanaphala*, *yastimadhu*, *patola panchanga* were taken and made into fine powder and mixed with sufficient quantity of *madhu* and *saindhava*. The combinations of these drugs were administered depending upon *rogibala*, *rogabala* and *koshta* assessment specific for *vamana karma*.

**B. Vamanopaga: Nimba twak & patra Kashaya**

➤ *Vamanopaga kashaya* was freshly prepared as mentioned in *Sharangadhara samhita*.

➤ Initially fresh *nimba patra* was plucked and are washed properly. These leaves were boiled and grinded well. To this four parts of water were added and boiled to reduce to half.

➤ Such prepared *kashaya* was made into lukewarm and used as *vamanopaga dravya*.

➤ **C. Equipments required:**

➤ About 5 L. of hot water was prepared and kept ready.

➤ Heating apparatus, *Nimba* twigs, cotton pads, 100gm of *saindhava lavana*,

BP apparatus, vessels, *dhooma yantra*, *haridra churna*, chairs, measuring jars were kept ready.

➤ Patient's blood pressure and pulse were recorded 5 minutes prior to the *vamana karma*.

➤ Patients were advised to sit on the chair of one's own knee height comfortably and the body of the patient was covered with cotton cloth.

➤ **D. Vamana Procedure**

➤ Initially *akanta pana* with lukewarm milk was given.

➤ After chanting *Dhanwatari mantra*, *vamaka yoga* was administered.

➤ Observation of the patient was made on the basis of features such as *sweda pradurbhava*, *romaharsha*, *kukshiradhmana* and *hrillasa* and *asya sravana*.

➤ Then if required, one more glass of milk is given to the patient. Meanwhile, if *vega* appears, the time of onset of first *vega* was recorded and also the content of vomitus was observed.

➤ If continuous *vega* is not occurring then to induce *vamana*, sufficient glasses of *nimba twak kashaya* (i.e. *vamanopaga dravya*) was administered. The time and quantity of the *kashaya* which was administered were documented. Patients were allowed to sit comfortably till the onset of bouts of *vega*. Repeatedly



*vamanopaga dravya* was administered after completion of every *vega*. During the time of *vega*, massaging over the back and sides were carried out in *pratiloma gati*. Gentle massage with little pressure was given over the umbilicus with the palm and side of the chest was supported to avoid the pain in the sides, so that *vamana* could take place effortlessly.

➤ Till the complete expulsion of the *kapha dosha* as well as the medicine, the patient was instructed to tickle the throat with neem twig repeatedly to eliminate the entire content of the *amashaya*.

➤ During the *antiki nireekshana* in terms of *pittanta*, *lavanodaka* was administered. After consuming it the patient starts to vomit greenish yellow coloured fluid, which is nothing but *pitta*. Hence the procedure was continued till the *pittanta*.

➤ After the completion of *vamana karma*, the patient was instructed to gargle the mouth with hot water and also advised to wash the hands & face.

➤ Five minutes after completion of *vamana karma*, blood pressure and pulse were recorded.

➤ Later advised the patients to lie down in left lateral position and rest for a while.

#### **PASCHAT KARMA**

➤ **A. Dhumapana**

➤ After 30 minutes of rest, prayogiki dhumapana was administered by using haridra churna.

➤ **B. Samsarjana krama**

➤ After analyzing *pravara* / *madhyama* / *avara shuddi*, *samsarjana krama* for 7 days / 5 days / 3 days was planned respectively.

#### **9. ASSESSMENT CRITERIA:**

❖ The patients were assessed on the basis of subjective and objective criteria before and after the *vamana karma*.

▪ **A. Criteria for assessment of *vamana karma***

Observation of *vamana karma*:

**1. Vegiki lakshana:**

Number of *vega* was observed.

**2. Laingiki Shuddi lakshana:**

*Laingiki* criteria were assessed based on symptoms of *samyak vamana lakshana*, which starts as a sequential elimination of *praseka*, *oushadha*, *kapha* followed by *pitta* and *vata*. Symptoms which are appearing after the *Vamana karma* was assessed by enquiring subjective and objective *lakshana* individually.

**3. Anthiki lakshana:**

*Antiki laxana* were assessed based on the feature exhibited at the end of all *vega*, in terms of whether it is *pittanta*, *kaphanta*, *oushadhanta*.

**4. Maniki lakshana:**





In classics, the explanation about the quantity of “*pravara, madhyama, and avara*” *shuddhi* in terms of one *prastha*, one and half *prastha*, and two *prastha* was explained. The assessment of *maniki* was considered based on the extra output of vomitus that was obtained after deducting the volume of input. One *prastha* in the context of *Vamana* is considered to be  $13^{1/2}$  *pala*. Hence one *prastha* is considered to be approximately 675ml.

### Criteria for assessment of Psoriasis:

#### 1. Subjective Criteria:

- Erythema. *Kandu*
- Scaling. *Srava*
- Itching. *Raga*
- Rashes *Utseda*

#### 2. Objective parameters

❖ PASI (Psoriasis area and severity index)

❖ **Auzpitz sign:** This sign occurs only in Psoriasis. Psoriasis can be diagnosed when there is a classical silvery white scaling and with the presence of Auzpitz sign. When hyperkeratotic scales are mechanically removed from a Psoriatic Plaque by scratching, within few minutes, small blood droplets appears on erythematous surface. This phenomenon is called Auzpitz Sign.

❖ **Candle Grease Sign:** When a psoriatic lesion is scratched with the point

of a dissecting forceps, a candle grease or stearin like scale can be repeatedly produced even from the non-scaling lesions. This is called as the candle grease sign.

#### ❖ Psoriasis Area and Severity Index

**(PASI):** A patient’s PASI is the measure of overall Psoriasis severity and coverage which is commonly, used measure in clinical trials for Psoriasis treatment. PASI was calculated before and after the treatment period in order to determine how well psoriasis responds to the treatment under trial.

**Table 1** description regarding observation in incidence

Parameters	Maximum Observations in parameters	Percentage %
Age	45-60 age group	40 %
Gender	Male	65%
Socio-economic status	Lower middle	65%
Occupation	Moderate	50%
Diet	Mixed	95%

### OBSERVATIONS

❖ In this present clinical study 20 patients diagnosed with psoriasis were administered with *sneha poorvaka vamana karma* by using *Kutajaphaladi yoga*.

❖ Number of patients registered in the study - 20

❖ Number of patients completed the study - 20

❖ Number of dropout - Nil



➤ The observation related with incidence found in this study is tabulated in the

Table no: 1

➤ Observations related with symptoms are depicted in table no 2

➤ Observations related with *Samyak snigdha lakshana* shown in Table no: 3

➤ Observations related with *Samyak vamita lakshana* are depicted in Table no: 4

**Table 2** Description regarding observations in symptoms

Parameters	Maximum observation	Percentage %
Onset of lesion	Gradual	100%
Character of the lesion	Discrete	90%
Shape of the lesion	Round	75%
Type of skin lesion	Maculo-papular	70%
Distribution of lesion	Exposed area	75%
Pattern of skin lesion	Localized	90%
Borders of skin lesion	Well demarcated	100%
Type of discharge	Powdery scaling	90%
Itching	Severe	80%

## RESULTS

The results were found to be statistically highly significant with 43.6 % change in mean PASI score from before treatment to after follow up at p value of 0.000.

➤ The observations of PASI SCORING are shown in Table no: 5

## ❖ OVERALL EFFECTS OF TREATMENTS:

All the study group patients having *kandu* as a symptom showed moderate reduction (66.7 %), *raga* (64.8 %), *srava* (75 %), mild reduction in scaling (43.2 %), moderate reduction in itching (50.8 %), skin rashes (53.6 %), and erythema (70.1 %). The results were found to be statistically highly significant with 43.6 % change in mean PASI score from before treatment to after follow up at p value of 0.000.

**Table 3** Descriptions regarding observations of *Samyak snigdha lakshanas*

<i>Snigdha lakshana</i>	No of patients	Percentage %
<i>Vatanulomana</i>	12	60
<i>Agni deepi</i>	14	70
<i>Snigdha varcha</i>	02	10
<i>Asamhata varcha</i>	10	50
<i>Snehodvega</i>	19	95
<i>Gatra mardavata</i>	18	90
<i>Twak snigdhatata</i>	18	90
<i>Anga laghava</i>	04	20

**Table 4** Description regarding observations of *Samyak vamita lakshanas*

Parameters	Max. Observations	Percentage %
<i>Anthiki</i>	<i>Pittantha</i>	100%
<i>Vegiki</i>	<i>Avara</i>	85%
<i>Laingiki</i>	<i>Samyak lakshanas observed</i>	100%
<i>Shuddhi</i>	<i>Avara</i>	70%

## DISCUSSION

*Vamana karma* is mentioned as an ideal choice of treatment modality in disorders caused by *kapha dosha*, *pitta samsrishta kapha* and *pitta sthanagata kapha dosha* (A.S.Su 17/4). *Vamana karma* is a *shodhana* treatment, which is best suited for diseases with *bahudoshavastha*, because of its



**Table 5** Descriptions regarding observations of PASI SCORE

PASI SCORING		Diff in means	% change	Paired t Test				Interpretation
Parameter	Mean score			S.D	S.E.M	T	P	
BT	29.4	6.8	23.12 %	13.7	3.0	9.2	.000	HS
AT	22.5			12.4	2.7			
AT	22.5	6.6	29.33 %	12.4	2.7	7.4	.000	HS
FU	15.9			10.5	2.3			
BT	29.4	13.5	45.91 %	13.7	3.0	10.1	.000	HS
FU	15.9			10.5	2.3			

*bahudosha nirharana* quality. *Vamana* is also mentioned as the first *shodhana* procedure which should be carried out before *virechana karma* in those diseases which are indicated for both.

*Vamana karma* can be performed by considering under the following headings in terms of *purvakarma*, *pradhana karma* and *paschat karma*. *Purvakarma* deals with the *sambhara sangraha*, selection & examination of the patient. *Deepana*, *pachana*, *snehana*, *abhyanga*, *swedana*, *manasopachara* (counseling) and dietetic regimen are to be considered. Dietetic regimen is further planned on the previous night of *vamana* & just before the process of *vamana karma*. *Pradhana karma* consists of administration of *vamaka yoga*, observations during *vamana* & four criteria for assessment of *vamana karma*. Each criterion is discussed in detail with reference, importance and explanation. *Pashchat karma* consists of *dhumapana*,

*parihara vishaya* and *samsarjana krama* including *pathya* and *apathya*.

Majority of the skin diseases are put under the name “*Kushta*” in *Ayurveda*. *Kushta* is a *tridoshaja vyadhi* which is known for its *deergha kaleena* and *dushchikitsya*. *Kushta* is also one among the few diseases where *sarva dhatugatatva* is explained and *Samshodhana* line of therapy is advised in *Purvarupavastha* itself because of its *bahudoshavastha*. Due to these reasons *Kushta* is best suited for *samshodhana* line of treatment.

In this present study *Chitrakadi vati* was selected for *deepana* and *pachana*. All the ingredients of this drug were possessing, *katu*, *tikta*, *lavana rasa* and *ushna veerya* resulting in the action of *deepana* and *pachana*.

*Snehapana* was done with *Nimbadi ghrita*, which is prepared in Sri Dharmasthala Manjunatheshwara College of Ayurveda, *rasa shala*. *Nimbadi ghrita* comprises the



drugs which possesses *tikta kashaya rasa*, *laghu*, *ruksha guna* and having *kushtaghna* & *kandughna karma*. Preparation of *Nimbadi ghruta* was done as per classics.

*Bahya snehana* in the form of *Abhyanga* was performed with *karanja taila* and *Parisheka sweda* was performed by using *karanja patra Kashaya*. *Karanja* had been mentioned under *kandughna gana* of *Charaka samhita*. After *abhyanthara* and *bahya snehana* most of the patients had resulted in reduction in the symptomatology such as itching, redness, and scaling.

*Vamana karma* was performed by using *kutajaphaladi yoga* which is a combination of *kutajaphala (Indrayava)*, *madanaphala*, *yastimadhu*, *patola panchanga*, *saindhava lavana* 2 gms each along with quantity sufficient honey which is prepared in the form of *leha* and administered orally. After administering the *vamaka yoga*, in every patient there was presence of *hrullasa*, *sweda pradurbhava*. Each bouts of *vamana vega* was measured and monitored. *Nimba patra kashaya* was used as *Vamanopaga dravya*. Most of the patients were habituated to consumption of *nimba patra* daily and hence for such patients it was easy to consume orally. When the *nimba twak kashaya* was given, some of the patients had *mukha praseka* earlier, later *kukshi adhmana* and *atopa* was observed in those

patients. The *nimba twak kashaya* was also inducing early vomiting sensation when compared to *patra kashaya*. Hence it can be understood from the clinical study that *nimba twak kashaya* was much more effective in terms of inducing early *vega* and clearing *amashaya* when compared to *nimba patra kashaya*. During the process of *vamana karma*, some of the patients developed weakness and also redness in the throat. One female patient had blood stain in vomitus due to the strain of *vamanakarma*.

## CONCLUSION

In this study, *abhyanthara snehana* was performed by using *Nimbadi ghruta* which was selected from *Harita samhita kushta rogadhikara*, and the *vamana yoga* was selected for the study was *Kutajaphadi yoga* from *Charaka Samhita Chikitsa sthana kustadhikara*. The drugs included in *kutajaphadi yoga* are *kutajaphala*, *madanaphala*, *yastimadhu*, *patola* and *nimba kashaya* was used as *vamanopaga dravya*. Patients were subjected to *vamana karma* following all the guidelines mentioned in the *Ayurvedic* classics. All the study group patients were having *kandu* as a symptom which was showed moderate reduction (66.7 %), *raga* (64.8 %), *srava* (75 %), mild reduction in scaling (43.2 %),



moderate reduction in itching (50.8 %), skin rashes (53.6 %), and erythema (70.1 %). The results were found to be statistically highly significant with 43.6 % change in mean PASI score from before treatment to after follow up at p value of 0.000.



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