



## CLINICAL STUDY TO EVALUATE THE EFFICACY OF VAMANA KARMA WITH MUDGARA (JASMINUM MALABARICUM WIGHT.) PATRA SWARASA IN PSORIASIS

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### ABSTRACT

**Introduction:** Vamana Karma is one of the Panchakarma Therapy for the elimination of vitiated Kapha Dosha. Psoriasis is an immune-mediated chronic inflammatory disorder which manifests as dermatological lesions. In Ayurveda, psoriasis is a Kapha Pradhana Kustha on the basis of their clinical presentations. **Method:** In this present clinical study, Mudgara (Jasminum malabaricum Wight.) Patra Swarasa was used to evaluate the efficacy of Vamana Karma in psoriasis. Multidimensional assessment of psoriasis was done with 'Psoriasis Area Severity Index' (PASI), 5D Itch Score, Auspitz Sign and Candle Grease Sign. An open clinical trial was done on 20 diagnosed psoriatic patients selected from the OPD/ IPD of the Department of Panchakarma at Shree Dharmasthala Manjunatheshwara Ayurveda Hospital, Kuthpady, Udipi, Karnataka. After proper Pachana-Deepana and Samyaka Snigdha Lakshana, patients were subjected to Abhyanga and Parisheka for 2 days. Vamana Karma was performed as mentioned in the classical Ayurveda text. Patients were examined before Snehapana, after Vamana Karma and on the 7th day after the Vamana clinically and Auspitz Sign, Candle Grease Sign, PASI & 5 D Itch Scores were determined. **Result:** The result of this study showed statically significant reduction in PASI and 5D Itch Scores ( $P < 0.01$ ). No marked changes were observed in Candle Grease sign after treatment. **Conclusion:** This study suggests that Mudgara (Jasminum malabaricum Wight.) Patra Swarasa is found effective in the management of Psoriasis.

**KEYWORDS:** Mudgara (Jasminum malabaricum Wight.); Patra Swarasa; Psoriasis; Vamana.

### INTRODUCTION

Panchakarma, the unique therapy of Ayurveda, attract the attention of people for the treatment of various disorders and also for their preventive and promotive effects. With the increase of awareness and global acceptance, it is the need of the hour to work on individual Karma (Panchakarma procedure), with different formulation for different diseases, in a scientific manner.

Vamana Karma is one of the Panchakarma procedures coined as Paramaushadha in Kaphaja Vyadhi. It is a choice of treatment for several Kaphaja Vyadhi like Shwasa, Kasa, Hrullasha, Pinasa, Ajeerna, Kustha etc.

In Ayurvedic texts, varieties of skin diseases are collectively mentioned as "Kustha". 18 types of Kustha Roga (skin diseases) are classified under Kustha. Psoriasis is related to Kapha Pradhana Kustha like Ekakustha, Mandal Kustha, Kitibha, etc, depending upon their clinical presentation.

Among the skin diseases, psoriasis is one of the common presentations affecting about 2% to 3% of the total population of the world and 0.44% to 2.8% of Indian population. The etiology of psoriasis is still poorly understood but it is clear that there is a genetic component to the disease. A positive family history, environmental factors are also contributing factors to the disease.

According to Sushruta Samhita, Vamana Karma is prescribed once in 15 days as the best treatment for Kustha. As there is no sufficient time to recover out of Pariharya Kala, Mridu Vamana is prescribed in Kustha. Hence, with this thought, Tikhsna Vamaka Dravya is not be used for such repeated Vamana Karma to the patients in this study. So, there is a need to find out Mridu Vamaka Dravya and its efficacy to use it repeatedly for Sodhana (Mridu Vamana) in case of Kustha. Mudgara (Jasminum malabaricum Wight.) 6,7,8, as per the knowledge and observations of Folk Vaidya acts as Mridu Vamaka Dravya. Hence, to evaluate the efficacy of Mudgara (Jasminum malabaricum Wight.) Patra Swarasa in inducing Vamana for the management of psoriasis, this study has been conducted.

## METHOD

It was a clinical study with Pre-test and Post-test Design conducted at Outdoor Patient Department (OPD) / Indoor Patient Department (IPD) of the Department of Panchakarma at Jammu Institute of Ayurveda and Research, Jammu (J&K).

A total of 20 patients suffering from psoriasis of both the sex having age in between 16-55 years were selected for the study.

Patients suffering from psoriasis and who were fit for Vamana Karma were included for the study. Patients suffering from Diabetes Mellitus, Hypertension, Hiatus hernia and other systemic diseases and who are unfit for Vamana Karma were excluded.

Written informed consent was obtained from each registered patient who met with inclusion criteria and fit for Vamana Karma.

In Poorva Karma, Pachana-Deepana was done by Agnitundi Vati (two tablets thrice a day) with lukewarm water till Ama Pachana and Agni Vruddhi took place. Acha Snehapana was done with Panchatikta Guggulu Ghrita in Arohana Krama till the appearance of Samyaka Snigdha Lakshana. Then Abhyanga with Stree Kutaja Taila followed by Parisheka with Karanjanimbadi Kashaya were done early morning, after voiding natural urges, at empty stomach, for 2 days i.e next day after completion of Snehapana and on the day of Vamana. On the day before the Vamana, patients were instructed to eat lots of Kaphotkleshakara Ahara like curd, sweets made out of milk, eatables made of black gram (eg. Idli, Plain Dosa, etc), Kheer, Khichadi of Maasha (~black gram) along with Jaggery, etc. Non vegetarian patients were allowed to take fish or mutton meat. Counseling was done on the day before Vamana about the procedure as well as to develop a courageous mind. They were also advised to be in an empty stomach and to pass bowel and bladder the next morning before Abhyanga, Parisheka and entering into Vamana room.

In Pradhana Karma, Vamana Karma was performed with administration of 100 ml of Mudgara (Jasminum malabaricum Wight.) Patra Swarasa as Vamaka Dravya, Akanthapana by lukewarm milk, quantity sufficient of Yashtimadhu Phanta as Vamanopaga Dravya followed by lukewarm water and Saindhava Jala. Blood pressure and pulse of the patients were recorded before, during and after the Vamana Karma.

For this study, fresh leaves of Mudgara (Jasminum malabaricum Wight.) were collected from plants available around Jammu Institute of Ayurveda and Research, Jammu.

Preparation of Swarasa was done by plucking sufficient quantities of fresh green healthy leaves of Mudgara (Jasminum malabaricum Wight.) and washed properly

with water. Leaves were torn into smaller pieces and pounded on Khalva Yantra in order to make Kalka. Kalka was squeezed and then filtered out by means of clean cloth piece and the Swarasa was collected.

In Paschat Karma, Dhumapana was given with Haridra Churna after providing a rest of 45 minutes after the Vamana Karma. After analyzing Vegaki Shuddhi and Manaki Shuddhi, conclusion regarding the grades of Shodhana was assessed as Pravara / Madhyama / Avara Shuddhi and accordingly Samsarjana Krama of 7 or 5 or 3 days was planned respectively.

## METHODS OF ASSESSMENTS

The data were collected from the patient and confidentially recorded. Subjective and objective parameters were assessed before Snehapana, on the day of Vamana and on 7th day after Vamana for both Vamana Karma and psoriasis.

Subjective parameters for Vamana Karma were assessed by symptoms of Samyaka and Asamyaka Vamana Lakshana i.e. Laingiki and Antiaki Shuddhi and for psoriasis is Itching which was assessed with a 5D Itch Score.

Objective parameters for Vamana Karma were assessed by signs of Samyaka and Asamyaka Vamana Lakshana i.e. Vaigaki and Manaki and for psoriasis were assessed by Auspitz Sign, 7 Candle Grease Sign 8 and Psoriasis Area and Severity Index (PASI).

The statistical data was recorded in the master chart and entered into MS Excel. The data was analysed through software IBS SPSS Version 22. The results were interpreted as significant ( $P < 0.05$ ), highly significant ( $P < 0.01$ ), and insignificant ( $P > 0.05$ ).

## OBSERVATIONS

All 20 patients registered for the study completed Vamana Karma. The demographic data showed that 60% of patients were males, 55% belonged to the age group of 26–35 years, 95% of patients were Hindu, 80% patients were from Medium Socioeconomic Status, 50% patients were service holders, 55% patients were Unmarried. Regarding Prakriti, 55% were of Kapha Pitta dominant Prakriti. Madhyama Koshttha was found in 65% of patients and Mridu Koshttha was found in 10% of patients. 15% of patients were associated with positive family history of Psoriasis.

The average time taken for Samyaka Snigdha was 4-5 days. Average amount of Ghrita required to attain Samyaka Snigdha Lakshana was 282.50 ml. Average time taken to expel the first Vega was 4.85 minutes. Average time taken for completion of Vamana Karma was 35.7 minutes.

Symptoms observed after administration of Vamaka Dravya were such that Adhmana was observed in 70% of the patients, Sweda Pradurbhava in 60%, Lalasrava in 55%, Hrillasa in 35%, Udgara in 30%, Romaharsha in 20% and Nisthivana in 35%.

## RESULTS

### Effect of Therapy on Subjective Parameters

Antiki Suddhi was obtained with Pravara in 25% of the patients and Madhyama in 75%. Laingiki Shuddhi was observed with Kalepravrutti in 100% of the patients, Anathimahativyatha in 60%, Yathakramatkapha, Pitta

Vata Doshaharana in 100%, Swayamachaavasthanam in 75%, Parshvashuddhi in 75%, Murdhashuddhi in 85%, Indriyashuddhi in 70%, Laghuta in 85%, Karshya in 70%, Dourbalya in 80%, Kanthashuddhi in 85%, Kaphasamsravaha in 55%.

### Effect of Therapy on Objective Parameters

Vaigiki Suddhi was obtained with Pravara in 90% of the patients and Madhyama in 10%. Maniki Suddhi was obtained with Pravara in 55% of the patients and Madhyama in 45%.

**Table 1: Changes by Vamana Karma: Auspitz Sign & Candle Grease Sign.**

Assessment		Positive %	Negative %	Significance level
Auspitz Sign	B.T	95	5	0.0001
	A.T	5	95	
Candle Grease Sign	B.T	30	10	0.0915
	A.T	5	95	

P0.05 (insignificant). BT: Before treatment AT: After treatment.

Auspitz sign and Candle grease sign were analysed using Fischer Test (F Test). The difference between Auspitz sign before and after treatment was found to be statistically highly significant 0.0001 (<0.05 at 95% CL). So, there exists a significant difference between the Auspitz sign before and after treatment. The difference

between Candle grease sign before and after treatment was found to be statistically comparatively less significant 0.0915 (<0.05 at 95% CL). So, there exists a similarity between the Candle grease sign before and after treatment.

**Table 2: Changes by Vamana Karma: PASI & 5D ITCH.**

Assessment	Mean + S.D	S.E	t test	Sig. (2-tailed)
PASI	7.905+5.424	1.213	6.517	.0001
5D ITCH Score	3.350+2.455	0.549	6.102	.0001

**P0.05 (insignificant). BT: Before treatment AT: After treatment, SD: Standard deviation, SE: Standard Error.**

In this study, PASI score 5D Itch scale were assessed before and after the treatment. The mean of the PASI score was observed 17.356±10.584 before the treatment (BT) and 9.46±5.790 after the treatment (AT). The mean difference between before the treatment and after the treatment was observed to be 7.905±5.424 at 95% Confidence limit (95% CL). The paired T test showed there is comparatively highly significant difference between the two observations since p value = 0.05 (95%CL). Since, the t value was observed 6.517 which is greater than the 1.729 (DF=19, p value=0.001) so, null hypothesis was rejected and a highly significant difference between the two variables was valid.

The mean of the Itch score before treatment (BT) was found to be 19.05±7.126 and after treatment (AT) 15.70±6.027. The mean difference between BT and AT of the score was found to be 3.30±2.455. The t value of the difference was found to be 6.102 supported by comparatively highly significant p= 0.0001 at 95% CL (confidence limit), this shows the null hypothesis was rejected and there exist a highly significant difference

before and after treatment of Vamana Karma on the psoriasis disease

## DISCUSSION

In Ayurvedic classics, no where Mudgara has been prescribed for Vamana Karma. Only in some Medicinal plant books, Vanamallika (Jasminum angustifolium Vahl.) of the same family and genus (Jatyadi Varga) is mentioned as Vamaka (emetic).

Mudgara (Jasminum malabaricum Wight.) Patra is used to induce Sadhya Vamana Karma in the condition of Gara Visha by Folk Vaidya. It induces mild Vega without producing any discomfort and complications. Patients with complaints of loss of appetite, sleeplessness, impaired digestion, irregular bowel habits, abdominal discomfort, general debility, loss of weight and anxiety believe it to be due to poisoning of food by enemies. Folk Vaidya manage this by purification method. 30-40 leaves of Mudgara (Jasminum malabaricum Wight.) are ground well by mixing with a cup of water and filtered. The extract is given to the patient early in the morning. This induces vomiting 4-5 times after an hour. This treatment gives immediate comfort to the patients.

The result obtained by means Mudgara (*Jasminum malabaricum* Wight.) Patra Swarasa in Vamana Karma in the present study like 75% of patients obtained Madhyama Antiki Suddhi, it can be concluded that it is a Mridu Vamaka Dravya. Hence, it can be used for Mridu Vamana in the patients of psoriasis repeatedly once in 15 days as prescribed in Sushruta Samhita as best treatment for Kustha.

#### Mode of Action of Vamaka Dravya

Any Vamaka Dravya possesses Guna like Ushna, Tikshna, Sukshma, Vyavayi, Vikasi and have predominance of Vayu and Agni Mahabhuta. But the main action is attained by the Urdhvabhagahara Prabhava possessed by these Vamaka Dravya. By the action of its Virya, the Vamaka Dravya reaches Hridaya and Dhamani, thereby reaching Shtula and Anu Srotas of Shareera. The Vyavayi Guna of the Dravya will help in quick absorption and movement of the Dravya. Vikasi Guna helps in breaking the binding of Dosha and Dushya. Due to its Ushna Guna, the Dravya causes Vishyandhana and due to Tikshna Guna causes Chedhana of Dosha. The Sukshma Guna helps to reach minutest channels. The Vayu and Agni Mahabhuta, because of their qualities like Laghutva and tendency to move upwards helps to induce Vamana. Moreover, Prabhava of the drug is especially responsible in bringing about the Vamaka action.

#### Associated factors and their relation with the occurrence of the disease

In this study, every patient has got gradual onset of skin lesion and positive history of progression of disease, winter as aggravating factor was recorded in 24.7% patients, 70% patients were having mixed diet, in case of Viruddha Ahara – 85% patients were having curd at night and 70% patients are having Ksheera with fruits, 28.1% patients were associated with anxiety, 50% of patients were not doing Vyayama, 50% patients were having disturbed sleep, Diwaswapna was recorded in 15% patients and Raatrijagarana in 55% patients.

#### LIMITATION OF THE STUDY

Mudgara (*Jasminum malabaricum* Wight.) acts as Mridu Vamaka Dravya, Pittanta Vamana is less recorded i.e. only in 25% of the patients.

#### CONCLUSIONS

Mudgara (*Jasminum malabaricum* Wight.) Patra Swarasa is an effective, safe, and useful emetic drug to induce Vamana. It is Mridu Vamaka in nature which is beneficial for performing Mridu Vamana in patients of psoriasis repeatedly in 15 days as prescribed in Sushruta Samhita as best treatment of Kustha. Clinically, this drug is effective for reducing signs and symptoms of psoriasis. This study recommends extensive study on probable mode of action and efficacy of Mudgara (*Jasminum malabaricum* Wight.) in the management of psoriasis.

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