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# Original Research Paper

Ayurveda

## THE STUDY OF EFFICACY FOR GANDHAPASHAN LEPA IN THE MANAGEMENT OF PAMA (SCABIES).

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In Ayurveda, almost all the skin disorders are explained under the broad term "Kushtha". Among this, ABSTRACT Pama can be correlated to Scabies. Drug of choice in contemporary science for Scabies is Permethrin and Ivermectin. The intense use of Pyrethrin and Pyrethroids may led to development of resistance in arthropods, which now constitutes a serious threat to management protocols. Ayurveda can be an answer in this regard as there are many formulations in its literatures. There are ample numbers of drugs available for Pama. Of these, Gandhapashan lepa was explained in  ${
m Vrudhayog}$   ${
m Tarangini}$  and  ${
m was}$   ${
m carried}$  out with the aim of assessing its efficacy in the management of  ${
m Pama}$  (Scabies).

## KEYWORDS: Pama, Pyrethrin, Pyrethroids, Gandhapashan lepa

#### INTRODUCTION

In Ayurveda, almost all the skin disorders are explained under the broad term "Kushtha". Among this, Pama can be correlated to Scabies, which is one type of the Kshudra Kushtha as explained in classics.

The worldwide occurrence of Scabies as an epidemic is responsible for infestation of an estimated 300 million people. As, it is highly contagious, it spreads rapidly in crowded condition. The Scabies rash can develop into complications like cellulitis, folliculitis, boils or impetigo. Therefore measures are necessary for its control. Drug of choice in contemporary science for Scabies proper is Permethrin and Ivermectin. Various researches showed that, a single application of Permethrin was effective in 97.8% of patients compared with 70% who received a single oral dose of Ivermectin. But, it has also been found that the intense use of Pyrethrin and Pyrethroids has led to development of resistance in arthropods, which now constitutes a serious threat to management protocols3.

In Ayurved, there are ample numbers of drugs available for Pama like Shweta karviradya taila, Arka taila, Tankan bhasma, Mahamarichyadi taila, Sinduradhya taila, Gandhak malahar lepa, Jasadamruta malahara, Gandhapashan lepa

Thus, this study was carried out with the aim of assessing the efficacy of Gandhapashan lepa in the management of Pama (Scabies).

#### **MIA**

To study the efficacy of Gandhapashan lepa in the management of Pama (Scabies).

## **OBJECTIVES**

- The study of Kshudra kushtha Pama with special reference to Scabies.
- The evaluation of the efficacy of Gandhapashan pishti with Katu tail lepa in the management of Pama (Scabies).

## DISEASE REVIEW: Ref. Cha.Chi. 7/13

There are eighteen types of Kushtha. Out of which seven are Maha kushta and eleven are Kshudra kushtha.Pama is one of the types of Kshudra kushtha.

## Pama-Nidan

Specific Nidan of Pama is not described in Ayurvedic classics, as Pama is one of the types of Kshudra kushtha. The causative factors attributed to kushtha can be considered same for Pama. The nidan can be broadly classified as Aaharaj, Viharaj, Daivavyapashraya, Chikitsa sambandhi

#### Pama-Roopa: Ref. Cha/chi 7/25

Shweta, Aruna, Shyava varna pidika with excessive itching.

## Pama-Samprapti: Ref: Cha/Chi 7/9-10

Samprapti of Pama has been not described in Ayurvedic texts separately.

But samanya samprapti forKushta has been described which considered here for Pama. Vitiation of the doshas takes place due to the nidana sevana, which also causes the formation of aama. As acharya Charaka has also mentioned that Pama is caused by Aama in Rakta. This aama yukta rakta gets tiryak gati and vitiates the Twak, Lasika, Rakta, and Mamsa and then it comes over the skin surface in the form of eruptions.

## Pama Samanya Chikitsa

- Nidana parivarjana
- Apakarshana (shodhana)
- Prakruti vighathan.

This is further sub classified into Antahparimarjana and Bahiparimarjana.

### MATERIALS AND METHODS MATERIALS

In the present study Gandhapashan lepa was used for bahya prayoga.

## Ingredients of Gandhapashanlepa

## Shuddha Gandhak (In Pishti form): 1 part

Rasa: Kashaya, Madhura, Katu, Tikta

Guna: Ushna, Snigdha, Sara

Veerya: Ushna

Vipaka: Katu

Doshaghnata - Vatashamaka

Karma- Krimihara, Sutajit, Kushtha-hara, shothahara, Sutendraviryaprada.

Gandhak is a stimulant to secreting organs such as the skin and the bronchial mucous membranes.

## Sarshapa Tail: 2 parts

Rasa-Katu, Tikta

Guna-Snigdha

Veerya-Ushna

Vipaka-Katu

Doshaghnata – Vatakaphashamaka

Karma - Raktashodhaka, Kandu - Kothaghna, Krimighna, Kushtaghna

#### **METHODS**

- Type of study Open clinical trial
- Place of study Bharati Vidyapeeth Deemed to be University, Ayurved Hospital, Pune.
- Method of examination was followed by nidanpanchak and rogipariksha by trividhpariksha and diagnosed Pama on the basis of pratyatmalakshnas i.e. Kandu (Nocturnal itching), Shweta- aruna- shyawa-kanduyukta pidika, Daha, Strava
- Number of patients-10

## Selection Criteria

## A. Inclusion Criteria

- 1. Patient having Pratyatmalakshanas of Pama (Cha/chi 7/25)
  - Kandu (Nocturnal itching)
  - Shweta, aruna, shyawa kanduyukta pidika
  - Daha
  - Strava
- Newly diagnosed patients of Pama having sign & symptoms before 10-15 days.
- 3. Patient of either gender.
- All family members treat simultaneously especially children.

#### B. Exclusion Criteria

- Patient suffering from any other acute or chronic, systemic or local disorders like DM, HTN, Psoriasis, fractures, Tuberculosis, HIV, Leprosy etc.
- 2. Norwegian scabies (crusted scabies)
- 3. Pregnancy and lactation
- 4. Infective focus

#### Investigations

If needed to detect and for exclusion of infective focus.

- CBC
- ESR

#### Table no.1 Drug administration schedule

	3	
Medicine	Gandhapashan lepa	
Dose	Sufficient quantity for external application.	
Āreα	local application – from neck to toe except	
	face	
Kala	Three consecutive days.	
Course of	One part Shuddha gandhakpishti is mixed with	
treatment	two parts of katu taila is applied from neck to	
	toe, every morning and evening for three	
	consecutive days, without bathing or changing	
	cloths, which are worn day and night.	

#### **OBSERVATIONS & RESULTS**

## Table no.2. According to signs and symptoms

No.	Signs and symptoms	Before treatment %	After treatment %
1	Kandu	100	70
2	Daha	100	10
3	Pidika	100	40
4	Strava	60	0

According to signs and symptoms, before treatment kandu, daha, pidika were found in all i.e. 100 % enrolled patients. Strava was found in 60 % patients and Upadrava in 30% patients.

After treatment kandu symptom reduced in 30% patients and daha in 90% patients. Pidika symptom reduced in 60%

patients and strava in 100% patients.

#### DISCUSSION

#### 1. Discussion on literature review

Charaka, Shushruta & Vagbhata describes Pama as Kshudra Kushta. In Madhava Nidana, Pama with its symptom is described. In Bhavaprakasha, Yogaratnakara, Vangasena, Chakradatta, the description of Pama and its treatment is available. Pama chikitsa is also available in Bhaishajya Ratnavali, Ayurveda Prakasha, Siddhaprayoga Latika, Siddha Bheshaja Manimala, Rasayoga Sagar, Brihat Yoga Tarangini etc. Symptoms of Pama can be correlate with scabies, in modern science sulphur is trusted medicine for long period.

#### 2. Discussion on materials and methods

In the present study, an effort has been made to discuss the probable mode of action of Gandhapashan lepa on Pama. Due to nidana sevana, vitiated Doshas forms the Ama. Ama gets teeryaka gati and traverses the channels and vitiates the Twaka, Laseeka, Rakta, Mamsa and then it comes over the skin surface in the form of eruptions.

## Probable mode of action of Gandhapashan lepa

Therapeutically, for samprapti vighatana of Pama, the drug should have properties like teekshana, ushna which are against the "Ama" guna. Overall properties of Gandhapashan lepa are kapha shamaka and Kushta, Kandu and shothahara properties as Pama is Kapha Pitta pradhana Kushta vyadhi. These characters should be present to neutralize the endogenous factors as well as exogenous process.

#### Why 3 days application of drug has taken

As per the study protocol, many therapeutic modalities for scabies are available, topical sulphur ointment is a cost-effective and safe therapeutic agent. It is often applied for the whole body for three consecutive days.

Precipitated sulphur is considered as a safe treatment for scabies. Sulphur may kill adult scabies mites. There is not clear evidence from studies showing how well it works. But it sometimes cures scabies, especially Norwegian scabies.

Female mites lays 10-25 oval eggs and numerous brown faecal pellets (scybala) daily. When egg laying is completed in 4-5 weeks, she dies within the burrow. The eggs hatch in 2-3 days, releasing larvae that move to the skin surface to molt into nymphs. Maturity is achieved in about 2-3 weeks. Mating occurs, and the gravid female invades the skin to complete the life cycle.

Scabies mites can survive off the human host and remain capable of infestation for an average of 24 to 36 hours at room conditions (21°C and 40 % – 80 % relative humidity) and up to 19 days in a cool, humid environment.

## 3. Discussion on observations

- Gender Wise Distribution: The 9:1 ratio observed in the study can be explained by realizing the fact that school covered during the surveys had maximum number of male students.
- Habitat: The study revealed that, the major proportion
  of patients i.e. 9 (90%) out of total 10 belonged to
  urban area. The reason being is that scabies spreads
  more in unhygienic conditions & overcrowded regions. As
  study institute was in urban area urban patients are
  greater in number.
- Mithya Ahaar: Out of total 10 patients, 50% had habit of adhyashan, 30% had vishmashna, 10% were habitual of anashana. Consumption of Mithya and

Viruddhahara gives rise to disease of acute to chronic nature including the eight Maharogas, Kushta being one amongst them.

Sleep Disturbance was present in 90% of the total patients. As scabies is frequently heralded by intense pruritus, which increases particularly in night time that causes the patient unable to sleep.

#### 4. Discussion on results

- Strava is mainly due to kapha dosha vikruti, Gandhapashan lepa has Tikta, Kashaya rasa, ushna veerya and kaphashamaka property which reduces strava.
- Kandu develops due to kapha dushti. As Gandhapashan Tikta, Kashaya rasa, ushna veerya, lepa has kaphashamaka properties, which reduces kandu.
- Daha occurs due to pitta dushti. Gandhak & sarshapa has Tikta rasa, pittashamaka property, that reduces daha.
- Pidika caused by the local Rakta Kapha dushti., so local application of Gandhapashan lepa having Tikta, Kashya rasa helps to normalize the sthanik rakta dushti.

Pama is a kapha pittajavyadhi and drug has Agnideepaka, Raktashodhaka, Krimihara property. Therefore significant result was seen in Kandu symptom but single application does not effective to cure other symptoms.

## CONCLUSION

The clinical study was aimed to evaluate the efficacy of Gandhapashan pishti with katu taila lepa in relieving the signs and symptoms of Patients affected with Pama.

Considering the observations and results, following conclusions can be drawn.

- The drug "Gandhapashan lepa" has shown its effect over Kandu, Daha, Strava were main complaints in
- These drugs have no adverse and toxic effect observed in the study except cloth staining.

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