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Clinical Study to Evaluate the Effectiveness of *Panchanimbadi Modified Yoga Basti in Vicharchika (Eczema)*

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ABSTRACT

Background and Objectives: This study was carried out to evaluate the effect of *Basti* in *Vicharchika* to see whether relief will be there or symptoms will aggravate or no change. *Vicharchika* is explained as one among *Ekdasha Kshudra Kushta* with predominance of *Kapha Dosh*. Hence, for the management of *Vicharchika*, *Acharyas* have mentioned different *Shodhana Karmas*. *Basti karma* is a type of *Shodhana*, in which vitiated *Doshas* are expelled through *Adhomarga*. *Basti Karma* has got a wide range of indications, including various skin disorders because of its capacity to act over all the three *Doshas* and lays a very important role to purify the blood. So the line of treatment for the above said condition revolves around *Tikta Shodhana Basti*. By keeping all these points *Panchanimbadi Basti* was selected for study.

Methods: Out of 30 registered patients, all of them completed the course of treatment. They were administered with 600ml of *Panchanimbadi Niruha Basti* and *Anuvasana Basti* with 100ml of *Mahatiktaka Ghrita* in modified *Yoga Basti Schedule*.

Result: Treatment was found to be statistically **significant** in attaining positive results with respect to *objective parameters* (Edema, Erythema, Excoriation, Lichenification, Region score, EASI Score, *Sraava*, *Rukshata*). But **not** statistically significant with *subjective parameter* (*Kandu*). But clinically, in subjective parameter also, there was improvement but not like other symptoms.

Conclusion: *Basti* is effective in *Kushta* if given according to particular symptoms and *Dosha* involved.

KEYWORDS

Vicharchika, Eczema, Panchanimbadi Basti, Yoga Basti.



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INTRODUCTION

The skin is the outermost covering of the body which acts as a protective barrier. But very often, it is exposed to many entities which can damage it and may cause many of the skin disorders. About 10-20% of the general practice includes the patients suffering from skin disorders and Eczema accounts for a very large proportion of all the skin diseases¹. *Vicharchika* being one among *Kshudra Kushta*, is also a *Rasa, Rakta* and *Mamsa Dhatu Pradoshaja Vikara*².

All the clinical features of *Vicharchika* can be correlated to clinical features of Eczema, which is distinctive pattern of inflammatory response of the skin, induced by a wide range of external and internal factors acting singly or in combination³. Eczema includes the effects of various microorganism, vast external environment, complex endocrine and metabolic transactions within the body and undue stress. The condition can impact considerably on the quality of life of the affected individual by causing physical discomfort, emotional distress, sleep disturbance, restriction of domestic and social activities and by imposing extra financial costs, as it will become a socially disagreeable condition⁴. There are several types of eczema. The commonest form encountered is atopic or allergic eczema.

There is currently no simple cure for eczema but several measures that can provide relief from symptoms and prevent relapses. Medicines used in eczema include emollients, topical corticosteroids, antihistamines, oral corticosteroids, oral antibiotics, local antibiotics, immune suppressants, light therapy. Many of the most effective agents used to treat severe eczema carry an increased risk of significant morbidity including damage to skin. Light therapy causes genetic damage, collagen damage to skin and eye. Though Ayurvedic (Indian system of medicine) approach to *Vicharchika* is effective and there is less recurrence without side effects.

In *Kushta* all three *Doshas* (*Vata-Pitta-Kapha*) and four *Dushyas* (*Tvacha-Rakta-Mamsa-Lasika*) got vitiated⁵. *Basti* is useful in the treatment of *Vata, Pitta and Kapha Doshas* and even in derangement of *Rakta Dhatu*. It is also effective in combination of two *Doshas* or all the three *Doshas*⁶. In *Samhitas*, *Acharyas* also mentioned *Niruha Basti* as *Kushtaghana Panchtikta Niruha Yoga*⁷. Hence for the management of *Vicharchika*, *Acharyas* have mentioned different *Shodhana Karmas*. *Basti Karma* is a type of *Shodhana*, in which vitiated *Doshas* are expelled through *Adhomarga*. *Basti Karma* has got a wide range of indications,



including various skin disorders because of its capacity to act over all the three *Doshas* and lays a very important role to purify the blood.

Basti is the best treatment for *Vata* and its disorders but is equally effective for *Pitta*, *Kapha* and *Rakta* and their disorders, provided the appropriate drugs are added in the preparation. Due to its all multifaceted actions, it is considered as half of the treatment in *Panchkarma*, though some *Vaidyas* consider it as a complete treatment⁸. *Vamana* and *Virechana* are being practiced successfully in management of *Vicharchika*. But some patients found it very difficult and *Snehapana* cannot be easily practiced in extreme temperatures. Hence this study of *Basti* in *Vicharchika* may be helpful to overcome all these negative aspects and symptoms. *Vicharchika* is a disease in which *Kandu*, *Pidika*, *Shayava* and *Bahu Sarava* present⁹. In modern science it can be correlate with Eczema in which skin appear with dark pigmentation, itching with profuse discharge from the lesion.

Vicharchika is characterised by dry skin with severe itching and marked lining and if same condition appear on feet with pain, then it is known as '*Vipadika (Rajyo, Atikandu, Atiruja, Ruksha Bhavanti Gatreshu lakshans)*'¹⁰. *Vicharchika* is a blackish brown eruption with intense

itching and pain¹¹ and has pin sized eruptions with ulceration and itching¹².

METHODOLOGY FOR CLINICAL STUDY

Ethical Committee Approval no SDM/IEC/34/2017/2018

SOURCE OF DATA

Thirty patients diagnosed as *Vicharchika* were taken for the study from OPD and IPD of Sri Dharmasthala Manjunatheshwara College of Ayurveda and Hospital, Hassan, Karnataka.

METHOD OF DATA COLLECTION

It is a clinical study to evaluate the efficacy of *Panchanimbadi Modified Yoga Basti* in *Vicharchika* where in, patients of either sex were selected. A detailed proforma was prepared considering all points pertaining to history, signs, symptoms and examinations as mentioned in our classics and allied sciences to confirm the diagnosis.

DIAGNOSTIC CRITERIA

Patients with classical signs and symptoms of *Vicharchika* supplement with signs and symptoms of Eczema.

- a. *Atikandu* (Excessive itching)
- b. *Bahusraav* (Edema and pustules)
- c. *Rukshta* (Roughness)
- d. *Shayavapidika* (Redness and pustules)
- e. *Raji* (Lichenification and thickening)

INCLUSION CRITERIA



- Fulfilling diagnostic criteria.
- Between the age group of 18 - 60years.
- Patient who are fit for Basti.
- Patient who are willing to sign consent form.

EXCLUSION CRITERIA:

- Uncontrolled Diabetes Mellitus
- Uncontrolled Hypertension
- Impaired Cardiac Function
- HIV and HBsAg positive
- Eczema with superadded infection.

STUDY DESIGN

This is a single arm, open clinical study with pre-test and post-test design where minimum of 30 patients diagnosed as *Vicharchika* of either sex were selected irrespective of their caste or creed. All the patients fulfilled the inclusion criteria were subjected to *Panchanimbadi Basti* and *Anuvasana Basti* with 100ml of *Mahatiktaka Ghrita* in Modified *Yoga Basti* schedule.

INTERVENTION

Plan of treatment for all Subjects in the following schedule:-

Sadyovirechana - With *Mannibhadra Gula* (40gm) + Hot Water

Vishramakala – one day

Purva Karma- On *Basti* day, *Sarvanga Abhyanga* with *Moorchita Tila Taila* followed by *Ushnajala Snana* to be done on subject.

Pradhana Karma –*Niruha Basti* was given in morning before food and *Anuvasana Basti* was given in afternoon after food in following schedule for 5 days:-

A	N	N	N	A
	A	A	A	

Table 1 Schedule of *Basti*

A= *Anuvasana Basti*

N= *Niruha Basti*

Table 2 *Basti Yoga*

NIRUHABASTI: 600ml	
<i>Makshika</i>	- 100ml
<i>Saindhava</i>	-10gm
<i>Sneha</i>	- <i>Mahatiktaka Ghrita</i> - 100ml
<i>Kalka</i>	- <i>Yashtimadhu Churna</i> + <i>Nagarmotha Churna</i> +
	<i>Vidanga Churna</i> + <i>Panchnimba Churna</i> + <i>Haridra Churna</i> - 75gm (each 10gm)
<i>Kwath</i>	-
<i>Khadira</i> + <i>Panchnimba</i> + <i>Haritaki</i> + <i>Vidanga</i> + <i>Amrita</i>	- 315ml

DURATION OF STUDY

Duration of treatment: 07 days

Duration of follow up: 10 days

Total duration of study: 17 days

METHOD OF PREPARATION OF NIRUHA BASTI

As per standard protocol.

METHOD OF ADMINISTRATION OF BASTI

As per standard protocol.

Parihara Kala

10 days of *Parihara Kala* was prescribed to the subjects (In *Basti*, *Parihara Kala* (days) should be double of days of schedule of *Basti*).

ASSESSMENT CRITERIA

Both subjective and objective parameters were assessed thrice i.e. before treatment, after treatment and on 10th day after



treatment. Assessment was also done based on EASI Scale. The *Samyak Niruha* and *Samyak Anuvasana Lakshanas* were assessed daily.

OBSERVATIONS

In this study, the effect of *Panchanimbadi Basti* was studied in 30 subjects suffering from *Vicharchika*.

No. of subjects screened for the study - 43

No. of subjects registered for the study - 30

No. of subjects completed the study - 30

No. of dropouts - 0

- Maximum(10) subjects belonged to the age group of 51-60yrs, 9 were belonged to 41-50yrs, 6 belonged to 31-40yrs and 5 belonged to 18-30yrs. Skin disease (eczema) can significantly affect your life at any age, doesn't belong to any age group.

- 16 subjects were male and 14 were female. Gender doesn't play any role in the manifestation of the disease Eczema.

- 22 subjects were married and 7 were unmarried and 1 was widow. By this data, it is not possible to draw a definite conclusion

that married persons are prone to get Eczema.

- Majority of the patients, 7 were from service class, 7 were housewives & 6 were doing business and 6 were involved in agriculture and 4 were students. Exposure in the workplace is responsible for a wide range of cutaneous problems.

- Maximum number of patients' i.e.19 in the study were mixed; whereas 11 of them had vegetarian diet habits. Based on this data, it is difficult to conclude the relation of this type of food habit.

- *Prakarati* -12 subjects were having *Kapha-Vata*, 7 were having *Pitta-Kapha*, 6 were having *Kapha- Pitta*, 3 were having *Vata-Pitta*, 2 were having *Sannipataja*.

- 22 were having disturbed sleep and 8 were having sound sleep. Because of itching at night subjects were having disturbed sleep.

RESULTS

Table 3 Friedman's Test of EASI score total

Parameter	N	Mean rank	X ²	P value	Remarks
EASI SCORE BT	30	2.93	52.680	<0.001	S
EASI SCORE AT	30	1.85			
EASI SCORE ON FOLLOW UP	30	1.22			

Friedman's test, BT- Before treatment; AT- after treatment; FU= follow up; X²- Chi-square, S- statistically significant; N=total subjects; P= probability

Effect of Panchanimbadi Basti on EASI score total: Table-3

There was a statistically significant difference in **EASI score total** after the



therapy (P value > 0.05). Friedman test in EASI score total was showing significant results and subjects got relief

Symptomatically in **EASI score total.**

Table 4 Wilcoxon signed rank Test of EASI score total

Parameter	Negative ranks			Positive ranks			Ties	Z value	P value	Remarks
	N	MR	SR	N	MR	SR				
EASI Score BT – EASI Score AT	27	14	378	0	0	0	3	-4.631	<0.001	S
EASI Score AT – EASI Score FU	18	9.50	171	0	0	0	12	-3.944	<0.001	S
EASI Score BT – EASI Score FU	29	15	435	0	0	0	1	-4.782	<0.001	S

Wilcoxon signed rank test, MR-Mean rank, SR-Sum of ranks, BT- Before treatment; AT- after treatment; FU= follow up; S- statistically significant; N=total subjects; P= probability

Effect of Panchanimbadi Basti on EASI

score total: Table-4

There was a statistically significant difference on EASI score total of lower

limbs after the therapy (P value < 0.05). On the whole Wilcoxon sign rank test was showing significant results and subjects got relief symptomatically also.

Table 5 Cochran's Q Test showing Effect of *Panchanimbadi Basti* on *Kandu*

Parameter	Value		Cochran's Q	p value	Remark
	Present	Absent			
KANDU BT	30	30	4.000	0.135	NS
KANDU AT	30	30			
KANDU FOLLOW UP	30	30			

Cochran's q test, BT- Before treatment; AT- after treatment; FU= follow up; S- statistically significant; N=total subjects; P= probability

Effect of Panchanimbadi Basti on *Kandu*: Table-5

There was statistically no significant difference of the therapy (P value > 0.05 i.e. 0.135) by Cochran's Q test. The treatment proved to be not significant for *Kandu*.

There was less decrease in percentage of *Kandu* during treatment comparable to other symptoms like from 50-60% after treatment and 60-70% on an average during follow up. There was no complete relief of *Kandu* in the subjects.

Table 6 Cochran's Q Test Showing Effect of *Panchanimbadi Basti* on *Sraava*

Parameter	Value		Cochran's Q	p value	Remark
	Present	Absent			
SRAAVA BT	30	0	50.400	<0.001	S
SRAAVA AT	24	6			
SRAAVA FOLLOW UP	0	30			

Cochran's q test, BT- Before treatment; AT- after treatment; FU= follow up; S- statistically significant; N=total subjects; P= probability

Table 7 McNemar Test Showing Effect of *Panchanimbadi Basti* on *Sraava*

Parameter	Value		p-value	Remark
	Present	Absent		
SRAAVA BT & AT	24	6	< 0.001	S
SRAAVA AT & FU	6	24	<0.001	S
SRAAVA BT & FU	0	30	<0.001	S



McNemar test, BT- Before treatment; AT- after treatment; FU= follow up; S- statistically significant; N=total subjects; P= probability

Effect of *Panchanimbadi Basti* on *Sraava*:

Table-7

There was a statistically significant difference of the therapy (P value < 0.05)

by McNemars test. The treatment proved to be significant for *Sraava*. There was complete relief in *Sraava*.

Table 8 Cochran's Q Test Showing Effect of *Panchanimbadi Basti* on for *Rukshata*

Parameter	Value		Cochran's	p-value	Remark
	Present	Absent			
RUKSHATA BT	30	0	33.429	<0.001	S
RUKSHATA AT	6	6			
RUKSHATA FU	9	21			

Cochran's q test, BT- Before treatment; AT- after treatment; FU= follow up; S- statistically significant; N=total subjects; P= probability

Effect of *Panchanimbadi Basti* on *Rukshata*: Table-8

There was a statistically significant difference of the therapy (P value < 0.05)

by Cochran's Q test. The treatment proved to be significant for *Rukshata*. There was complete relief in *Rukshata*.

Table 9 McNemar Test Showing Effect of *Panchanimbadi Basti* on *Rukshata*

Parameter	Value		p-value	Remark
	Present	Absent		
RUKSHATA BT & AT	24	9	0.031	S
RUKSHATA AT & FU	6	6	0.000	S
RUKSHATA BT & FU	9	21	0.000	S

McNemar test, BT- Before treatment; AT- after treatment; FU= follow up; S- statistically significant; N=total subjects; P= probability

Effect of *Panchanimbadi Basti* on *Rukshata*: Table-9

There was statistically significant result of the therapy (P value < 0.05) by McNemars test. The treatment proved to be significant for *Rukshata*. There was complete relief in *Rukshata*.

Kwatha (*Khadira*, *Panchnimba*, *Haritaki*, *Vidanga*, *Amrita*) and *Ghrita* (*Mahatiktaka Ghrita*) are beneficial for *Vicharchika*.

In *Bhaisajya Ratnavali*, *Acharya* mentioned that *Yastimadhu* (*Glycyrrhizaglabra* Linn which comes under *Papilionaceae* family) has got *Madhura Rasa*, *Guru Snigdha Guna*, and *ShitaVirya*. It has got Antioxidant, Anti Inflammatory, Expectorant, Antiulcer, and Hepatoprotective actions¹³. *Nagarmotha* or *Musta* (*Cyprus rotundus* which comes under *Cyperaceae* family) has got *Sheetala*, *Deepana*, *Pachana*, *Vatanulomana*,

DISCUSSION

Panchanimbadi Basti acts like a *Shodhana Basti*.

In which, *Kalka* (*Yastimadhu Churna*, *Nagarmotha Churna*, *Vidanga Churna*, *Panchnimba Churna*, *Haridra Churna*) and



Grahi, *Swedajanan*, *Kaphaghana*, *Kandughana*, *Jantunashaka*¹⁴ *gunas*. *Vidanga* (*Embeliaribes* which comes under Myrsinaceae family) has got *Raktashodhaka*, *Kushtaghana*, *Krimighana*, *Vibhandhara* and *Varnaya*¹⁵ *gunas*. *Nimba* (*Azadiracta indica* which comes under Meliaceae family) has got *Raktashodhaka*, *Krimighana*, *Kapha-Pittaghana* *Gunas*¹⁶. *Khadira* (*Acacia catechu* which comes under Mimosoideae family) has got *Kushtaghana*, *Kandughana*, *Krimighana*, *Shothara*, *Pachana* *gunas*¹⁷. *Haritaki* (*Terminalia chebula* which comes under Combretaceae family) has got *Anulomana*, *Kushtaghana*, *Shothara*, *Krimighana*, *Kandughana*, *Sulahara*, *Lekhana*, *Vranahara* *gunas*. This is *Rasayana* also¹⁸. *Aragwadha* (*Casia fistula* which comes under Fabaceae family) has got *Anulomana*, *Dahashamaka*, *Vedanasthapaka*, *Varnahara* *gunas*¹⁹. *Guduchi* (*Tinospora cordifolia* which comes under Menispermaceae family) has got *Jawahara*, *Rasayana*, *Amahara*, *Dahahara*, *Kushtaghana*, *Deepana* *Gunas*²⁰. *Haridra* (*Curcuma longa* which comes under Zingiberaceae family) has got *Raktashodhaka*, *Twagdoshara*, *Shothara*, *Deepana*, *Pachana*, *Vishaghana*, *Varnahara*, *Kaphara* and used in skin diseases²¹. *Mahatiktaka Ghrita* instantly

cures *Kushta*, *Raktapitta*, *erysipelas*, *Vatarakta*, *Visphota*, *Pama* etc. It contains *Saptaparna* (*Alstonia scholaris*), *Shampaka* (*Cassia fistula*), *Tiktrohini* (*Picrorhiza kurroa*), *Patha* (*Cissampelos pariera*), *Musta* (*Cyperus rotundus*), *Ushira* (*Vetiveria zizanioides*), *Ativisha* (*Aconitum heterophyllum*), *Triphala*, *Patola* (*Tricosanthes dioica*), *Parpataka* (*Fumaria indica*), *Dhanvayasa* (*Alhagi pseudalhagi*), *Chandana* (*Sandalwood*), *Pippali* (*Piper longum*), *Gajapippali* (*Piper chebuba*), *Padamak* (*Prunus poddum*), *Haridra* (*Curcuma longa*), *Uruharidra* (*Berberis aristata*), *Uragandha* (*Acorus calamus*), *Vishaka* (*Citrulus cholocynthis*), *Shatavari* (*Asparagus racemosus*), *Sariva* (*Hemidsemus indicus*), *Vatsakbija* (*Holarrhena antidysentrica*), *Vasa* (*Adhotada vasica*), *Murva* (*Marsdenia tinescsima*), *Amruta* (*Tinospora cordifolia*), *Kiratiktika* (*Swertia chiraita*), *Yastimadhu* (*Glycyrrhiza glabra*), *Trayamana* (*Gentiana kurroa*), *Water* and *Amalaki phala rasa* and *Ghrita*²².

Moorchita Tila Taila-This *taila* is considered as best *Sneha* for *Swastha*. It contains *Musta* (*Cyperus rotundus*), *Haridra* (*Curcuma longa*), *Lodhra* (*Symplocos racemes*), *Hrivera* (*Coleus vettivaroides*) and *Tila Taila*²³. *Manibhadra Guda* contains *Vidanga Sara*, *Amalaki*, *Abhya*, *Trivrut* and *Guda*. It is



used as a *Virechaka* in diseases like *Kushta*, *Pleeha*, *Krimi* etc²⁴

❖ *Grahi* acts on Spongiosis (Spongiosis is mainly intercellular edema due to abnormal accumulation of fluid in the epidermis and leads to juicy papules and lichenification).

❖ *Vishaghana*, *Raktashodhaka* and *Krimihara* purifies blood and other *dhatu*s also.

❖ *Shothahara* and *Vranahara* properties heals the skin and act on spongiosis, acanthosis (dark velvety patches) and lymphohistiocytic.

❖ *Agnikruta*, *Pachana Guna*, *Deepana*, *Vatanulomana*, *Amahara* properties corrects all *Agni*s and whole digestive system.

❖ *Rasayana*, *Jwarahara*, Antioxidant, Hepatoprotective properties improves immunity and prevents from immune abnormalities (including increased serum IgE) and prevents from mutation from flaggarin protein.

OVERALL EFFECT OF THERAPY:-

❖ Treatment was found to be statistically **significant** in attaining positive results with respect to *objective parameters* (Edema, Erythema, Excoriation, Lichenification, Region score, EASI Score, *Sraava*, *Rukshata*). But **not** statistically significant with *subjective parameter* (*Kandu*).

❖ But clinically in subjective parameter there was improvement but not like other symptoms.

❖ Considering the course of the therapy, treatment was found to be statistically significant during the course of *Basti* but during the follow up few symptoms were not statistically significant this may be because of small sample size.

❖ On the whole treatment was found to be statistically significant between the assessments done before treatment to the day of follow up of the treatment.

❖ There was relief in the symptoms of *Vicharchika* in different extent.

There was no aggravation of any symptom of *Vicharchika* during and after treatment.

CONCLUSION

❖ Administration of *Panchanimbadi* Modified *Yoga Basti* for a period of 5 days brought positive results in edema, erythema, excoriation, lichenification, region score, *Sraava*, *Rukshata* and Easi score, but not in subjective parameter i.e *Kandu*.

❖ The treatment was found to be much effective in *Sraava*.

❖ No untoward effects or complications were noticed during the course of therapy.

❖ Hence administration of *Panchanimbadi Basti* in modified Yoga



Basti schedule i.e. period of 5 days was found to be effective in management of Eczema (*Vicharchika*).

❖ Thus research hypothesis is accepted.



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