



## A CLINICAL STUDY TO EVALUATE THE EFFICACY OF PANCHATIKTA NIRUHA BASTI IN THE MANAGEMENT OF KITIBHA KUSHTA VIS-A-VIS PSORIASIS

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**Abstract : Background** “Sarva Chikitsamapi Bastimeke.” This quotation points out the supreme position of Basti among all treatment principles. The efficacy of Basti is well defined by all the Acharyas, who accept it as Ardhachikitsa, Though Basti can be given in all age groups without any hesitation, Kashyapa refers to Bastikarma as ‘Amrutam’. Kitibha kushta is one among the kshudra kushta, having a predominance of vata and kapha dosha, characterized by shyavam, aruna, kandu, drudham, khinakhara sparsha, resembling the clinical features of psoriasis. It significantly impacts quality of life, causing low self-esteem, depression, and social isolation, making psoriasis a serious global problem. In classical texts, shodhana is given prime importance in the treatment of kushta, which should be performed as “stokam stokam nirharayet punah punah shodhayet.” Basti is contraindicated in kushta in some contexts, such as shotha, srotorodha, and medha pradhanyata, but as per the treatment principles of kushta, the treatment is planned based on the predominance of dosha. For vata pradhana kushta like kitibha, basti is the choice of treatment modality, and even in cases of avarbala, snehadveshi, and sukumara, basti is considered the ideal line of treatment instead of vaman and virechana. References to basti karma in kushta chikitsa can be found in various texts, including Charak Siddhi Sthana. One such treatment is Panchatikta Niruha Basti, which is planned in the present study. This treatment consists of panchatikta kwatha and sarshapa kalka, which have ushna virya and katu vipaka, providing vataharan and kapha chedhana effects, with kandughna and kushtagna properties that aid in the management of kitibha kushta. **Methodology:** The study was a single-group observational study involving 30 subjects with a pre- and post-test trial. Panchatikta Yoga Basti was administered for a duration of 8 days. The assessment was based on the signs and symptoms of kitibha kushta and the PASI scale of psoriasis. **Result:** Statistically significant results were observed in shyava varna, kandu, drudam, khar sparsha, and the PASI scale. **Conclusion:** Based on the results, it can be concluded that Panchatikta Yoga Basti is effective in the management of kitibha kushta.

**Keywords** – Kitibha Kushta , Psoriasis ,Panchatikta Niruha Basti, PASI Scale

### I. INTRODUCTION

Ayurveda, the ancient Indian system of medicine, emphasizes the holistic treatment of diseases, particularly through specialized panchakarma therapies. Basti holds a paramount position among these therapies, often referred to as "Ardhachikitsa"<sup>1</sup> and at times considered "Poorna Chikitsa." Its unique method of administering medicated dravya through the guda allows it to effectively target disorders present from hasta to padaa and eliminate morbid doshas from the body, acting swiftly to restore balance<sup>2</sup>.

Prasruta Basti comprises a unique set of basti treatments planned for individuals who are sukumara, such as those who become exhausted by performing nitya karya. For these individuals, the prasruta pramana of mruudu and snehana guna yukta niruha basti is recommended. As they may be unable to withstand the dwadasha prasruta pramana of niruha basti, In such cases, basti, being sheegra sukha vishoditva and aashu tarpana yogitvat, becomes shrestha.

Within the spectrum of skin disorders, kitibha kushta is one of the kshudra kushta, characterized by the predominance of vata and kapha dosha. It is defined by shyavavarna, khina khara sparsha<sup>3</sup>, and ugaru kandu. Kitibha kushta shares similarities with psoriasis, including its presentation of dryness, scaling, and chronic nature. The prevalence of psoriasis in India ranges from 0.4% to 2.8% of the total population, with its incidence among skin patients ranging between 0.44% and 2.2%<sup>4</sup>. Present contemporary treatments include topical and oral corticosteroids, keratolytics, analogues of Vitamin D3, retinoids, and phototherapy, which provide symptomatic relief<sup>5</sup>.

Panchatikta Niruha Basti<sup>6,7</sup> is a unique prasarutika basti indicated in conditions like prameha, kushta, and abhishyandha. It comprises kashaya dravya consisting of five bitter ingredients: patola, bhunimba, nimba, rasna, and saptachadha, with sarshapa kalka mentioned for the kalka and panchatikta ghrita used as sneha. In this formulation, ingredients like nimba are kapha pitta shamaka and krimighna; patola is tridoshaghna; bhunimba is kapha pittaghna, kushtaghna, and raktadoshahara; while rasna and saptaparna are kaphavata shamaka. According to Astanga Hridaya, tikta rasa is indicated in conditions involving krimi, visha, kushta, pitta kapha doshas, and rakta kleda medha dushti. In kushta, there is dusti in tridosha, rakta kleda, and medas. Since these tikta rasa dravyas possess laghu ruksha guna, katu vipaka, and ushna veerya, they help decrease kapha, pitta, and kleda, potentially aiding in samprapti vighatana. The present study aims to evaluate the efficacy of basti, which is niratyaya (producing fewer complications), effective, and equivalent to other shodhana methods in kushta.

## MATERIALS AND METHODS

### SOURCE OF DATA

Subjects were selected randomly from the OPD and IPD of Government Ayurveda College and Hospital, Mysore and Hitech Panchakarma Hospital, Mysore who fulfilled the inclusion criteria of the study irrespective of their sex, religion etc.

### SOURCE OF THE DRUG

Formulation panchatikta kashya dravya and panchatikta ghrita mentioned in Charka Samhita sidhi sthana, manufactured by S.N. Pandit and son's Co. Pvt. Ltd, Mysuru, (a GMP certified pharmacy) was procured for the purpose of study.

### DIAGNOSTIC CRITERIA

Clinical features of kitibha kushta and Psoriasis with positive auspitz sign and candle grease sign

### INCLUSIVE CRITERIA

- Subjects fulfilling diagnostic criteria
- Subjects between age group of 18– 60 years, irrespective of gender
- Subject fit for basti karma
- Subject with Both freshly diagnosed and treated cases

### EXCLUSIVE CRITERIA

- Subject having symptoms like pustular psoriasis, generalized Oedema, cellulitis, and other dermatological conditions except psoriasis.
- Subjects with stage 2 Hypertension (160/100).
- Subject with diabetes mellitus • Pregnant and lactating women.
- Subjects with other systemic illnesses that interfere with the intervention.

**Study design:** Single group observational study with pre and post study design

**Sample size:** Study was conducted on 30 subjects.

**Sampling technique:** Purposive sampling.

**Duration of the intervention:** The study duration was 38 days (for yoga basti- 8 days, Follow up period - 30days)

## INTERVENTION

**Table no 1: showing details of intervention**

<i>Poorvakarma</i>	<ul style="list-style-type: none"><li>• Deepana and panchana with chitrakadi vati 250 mg Tid and Panchakola choorna 5 gm bd before food till nirama avastha</li><li>• Sarvavanga Abhyanga with Murchita tila taila followed by mrudu Bhashpa swedha</li></ul>																
<i>Pradhan Karma</i>	<p>Basti karma was administered in yoga basti pattern</p> <ul style="list-style-type: none"><li>• Niruha basti (N) - panchatikta niruha basti (570ml)</li><li>• Anuvasana(A) - panchatikta grihta(90ml)</li></ul> <table><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td></tr><tr><td>A</td><td>N</td><td>A</td><td>N</td><td>A</td><td>N</td><td>A</td><td>A</td></tr></table>	1	2	3	4	5	6	7	8	A	N	A	N	A	N	A	A
1	2	3	4	5	6	7	8										
A	N	A	N	A	N	A	A										

<i>Paschat Karma</i>	<ul style="list-style-type: none"> <li>• Observations of samyak basti lakshanas</li> <li>• After basti pratyagamana, Patya was advised</li> </ul>
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### Ingredients of intervention:

#### Niruha basti – Panchatikta niruha basti

- Madhu- 60 ml
- Saindhav lavan – 5gm
- Sneha – panchatikta grihta -90 ml
- Kalka – sarshapa kalka- 40 gm
- Kwatha- panchatikta kwatha – 380 ml
- Anuvasana basti – panchatikta grihta - 90 ml

### ASSESSMENT SCHEDULE:

- Pre test assessment – 0<sup>th</sup> day
- Post test assessment – 8<sup>th</sup> day
- Follow- up – first follow on 23<sup>rd</sup> day  
Second follow up on 38<sup>th</sup> day

### ASSESSMENT CRITERIA:

Clinical features of *kitibha kushta* and psoriasis was taken for the assessment

#### Subjective criteria:

1. *shyavam varna* (brownish black discoloration )

table no 2: showing grading of shyavavarna

Normal skin	0
Slight rough lesion	1
Roughness on more than 2 lesions	2
Roughness at all body lesions	3

2. Khara sparsha (rough to touch )

table no 3: showing grading of khara sparsha

Normal skin	0
Slight brownish black lesion	1
Dark patch can be Seen on the skin	2
Black spot with variation	3

3. *Kandu* ( itching sensation)

table no 4: showing grading of kandu

No itching	0
Tolerable itching	1
Can't be tolerable but don't disturb Sleep	2
Which disturb sleep and other activities	3

#### 4. Drudham (sharply circumscribed lesion):

table no 5: showing grading of drudam

Normal skin	0
One or two lesions	1
Two or more lesion on more than one body part	2
Well defined lesion all over the body	3

#### 5. Prashantani cha punarutpadyante ( reoccurrence of symptoms )

table no 6: showing grading of reoccurrence of symptoms

Not present	0
One or two small lesions on the body	1
2 or more lesions over more than one body par	2
Lesions present all over the body	3

#### Overall assessment:

1. Good: 75% and more than 90% reduction of PASI score
2. Moderate: In between 70% to 60% reduction of PASI score
3. Mild: 50% reduction of PASI score
4. Poor: Less than 50% Score

**STATISTICAL METHOD:** The Results were analyzed statistically by using, Paired “t” test, CHI Square test, ANOVA Repeated measures as inferential statistics and mean, standard deviation as Descriptive statistics using SPSS for windows software.

#### OBSERVATIONS:

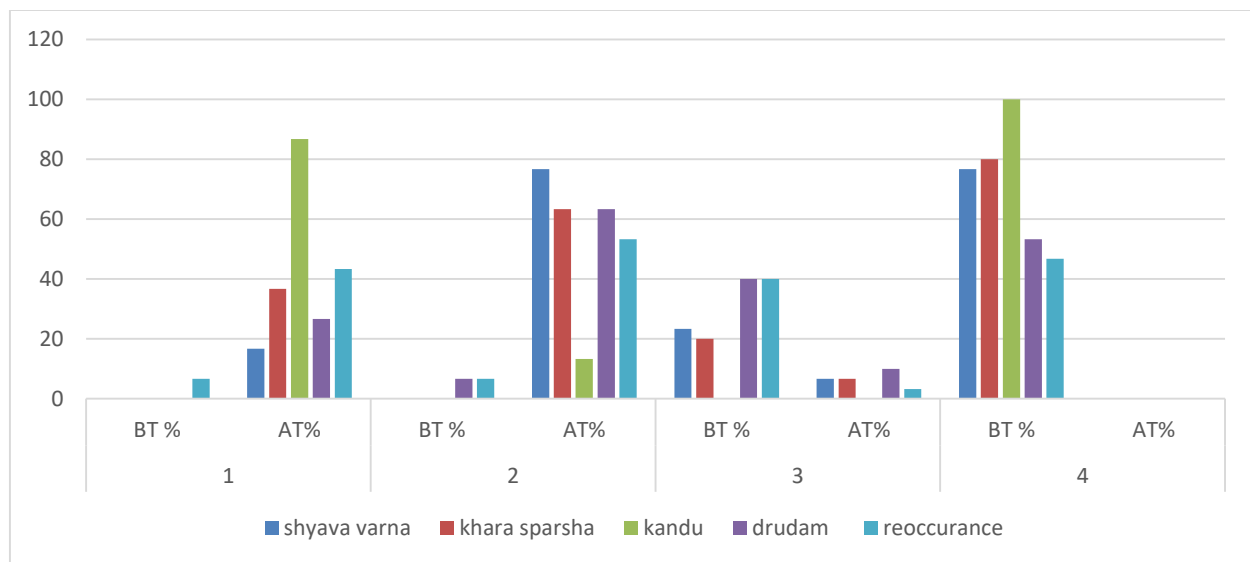
In the present study it was observed that kitibha kushta was common in the age group of 40-60 years, males (600%) were more affected than females (40%), The data shows an equal distribution between urban and rural areas, 11 out of 30 subjects have a family history, incidence was more in middleclass population (43.3%) and was more in people with mixed diet habits (80%). The majority of cases are chronic plaque 21 (70%), with PALMOPLANTAR affecting 9(30%). This observation suggests that the incidence of plaque psoriasis is more compared to other varieties of psoriasis and Plaque psoriasis resembles more with kitibha kushta by its khinakhara sparsha features.

#### RESULTS:

##### Kitibha kushta lakshana:

score	1		2		3		4	
	BT %	AT%	BT %	AT%	BT %	AT%	BT %	AT%
shyava varna	0	16.7	0	76.7	23.3	6.7	76.7	0
khara sparsha	0	36.7	0	63.3	20	6.7	80	0
kandu	0	86.7	0	13.3	0	0	100	0
drudam	0	26.7	6.7	63.3	40	10	53.3	0
reoccurrence	6.7	43.3	6.7	53.3	40	3.3	46.7	0

Fig 1: Graphical representation of kitibha kushta lakshana before and after treatment



**Table No. 134. Showing overall assessment result**

Sl.no	Improvement	Number of Subjects	Percentage %
1	Marked improvement	27	90%
2	Moderate improvement	3	10%
4	Mild improvement	0	0
5	No improvement	0	0

Overall assessment was done based on the subjective parameters. After treatment, on 9th day 16(53.3%) subjects had marked improvement, 4(13.3%) subjects had moderate improvement, 9(30%) subject had mild improvement 1(49% reduction in overall symptoms) subject had poor improvement. At the time of follow up, on 30<sup>th</sup> day, 27(90%) subjects had marked improvement in which 11(41%) patient had complete relief, 3(10%) subjects had moderate improvement.

## DISCUSSION:

### Discussion on Niruha Basti Samyak Lakshana:

The study on Niruha Basti revealed consistent *Samyak Lakshana* across all participants. Key findings include the presence of *srusta mala mutra samreenatva* (eliminated waste), which was observed daily in all patients. *Agnideepti* and *ashaya laguta* were reported by 80% of participants daily, indicating consistent improvement in digestion and lightness in the abdominal area. Additionally, *roga upshanti* (relief from disease) was noticed by 53.3% of patients after the first Niruha Basti. Statistically significant improvements were noted in *ruchi* (taste) and *agni deepti* (digestion), suggesting that Basti enhances *Apana Vata* and *Samana Vata*, leading to better digestion and detoxification.

### Discussion on Anuvasana Basti Samyak Lakshana:

In the Anuvasana Basti group, 100% of participants experienced *adhashta sneha darshana* (oil application sensation) and *srusta vega* (evacuatory urge) daily. Other symptoms, such as *laghuta* (lightness), appeared in 50% of patients by the third Anuvasana and *sukha swapna* (sound sleep) in 40% by the second Anuvasana. *Bala vrudhi* (increased strength) was noted by 30% by the fourth Anuvasana. No cases of *Ayoga* (insufficient effect) or *Atiyoga* (excessive effect) were observed in the study.

### Niruha Basti Mechanism and Effectiveness:

Niruha Basti's *tikshana* (sharp) and *ushna* (hot) properties, aided by *saindhava* (rock salt) and *sarshapa kalka* (mustard paste), induce colonic distension, stimulating nerve endings and evacuating toxins through *Prasrushta Vata*, *mala*, and *mutra*. The improvement in *ruchi*, *agni deepti*, and *ashaya laghuta* suggests the effectiveness of Basti in *Agni Vardhana* (enhancing digestion) and *Mala Shodhana* (elimination of waste). The increase in *bala* (strength) and *nidra* (sleep) from the third day indicates the restoration of strength and well-being.



**Retention and Effectiveness:**

The mean retention time for Niruha Basti was 5.97 minutes across all three administrations, with the second retention being the highest. Despite shorter retention times, the effectiveness was not compromised due to the quick absorption of active components. In contrast, Anuvasana Basti showed an average retention time of 5.73 hours, which gradually increased over consecutive treatments, reflecting the body's adaptation and improved absorption.

**Vega and Therapeutic Implications:**

In Niruha Basti, 2 *vega* (evacuatory urges) were most commonly observed, with 80% of patients experiencing this by the third Basti. In Anuvasana Basti, 90% of patients had 1 *vega*, indicating a milder evacuation. The increased *vega* in Niruha Basti correlates with the normalization of *Vata* and improved digestion and metabolism.

**Mode of action :****Procedural effect:**

*Panchatikta niruha basti* is a unique *prasrutika basti* which is indicated in the conditions like *prameha*, *kushta* and *abhishyandha* having ingredients like *kashya dravya* consist of *pancha tikta dravya* namely *patola*, *bhunimba*, *nimba*, *rasna* and *saptachadha*, *sarshapa kalka* is mentioned to be used for *kalka*, *ghrita* is used as *Sneha*. In this formulation *dravya*'s have *laghu ruksha guna*, *tikta katu rasa pradhana*, *vata kaphara* in nature, does *shoshana* of excessive *kleda* and are potent *kushtaghana* and *kandughana*, helps in *samprapti vighatana* of *kitibha kushta*<sup>9,10</sup>

**Action dosha:**

Basti is highly effective in managing *Kitibha Kushta*, which is primarily influenced by *Vata*, with *ruksha* (dry) and *chala* (mobile) qualities causing the lesions to spread. By normalizing the movement of *Vyanavata* and performing *Pakvashaya Shodhana*, Basti purges accumulated doshas from the colon, halting the spread of lesions and addressing the root cause of the disease. *Kitibha Kushta* is also a *samsargaja* (*Vata* and *Kapha*) disorder, and Basti is the only effective treatment for such conditions. It eliminates accumulated *Vata*, *Pitta*, and *Kapha*, normalizes *Kledaka Kapha* by enhancing *Agni*, and reduces *Kapha* accumulation in the *srotas*. Additionally, Basti helps balance *Pitta* and *Rakta*, reducing *Pitta Sara* (spread) and promoting healing by improving *Rakta Dhātu* and complexion. Thus, Basti offers a comprehensive solution to the complex nature of *Kitibha Kushta*.

**Action on twak**

*Twaka* is the *ashraya sthana* of *Vata*, and *vikruti* in *Vata* leads to the skin abnormalities seen in *Kitibha Kushta*, such as *kharata* (roughness), *prushata* (scaling), *khina sparsha* (lack of sensation), and *rukshata* (dryness). Basti not only eliminates vitiated *Vata* (*Vatahrana*) but also improves *varna* (color) and restores the skin's softness and suppleness (*mardhavata*). It effectively addresses the *Vata* imbalances in the skin, offering both curative and promotive benefits for the health of *Twaka*.

**Action of anuvasna basti:**

*Anuvasana Basti* is indicated in *Kushta* with *Vata* predominance or *Vata-dominant Sansrita Dosha*, exhibiting symptoms like *khara sparsha* (roughness), *rukshata* (dryness), and *parushata* (hardness), commonly seen in *Kitibha Kushta*. The *Snigdha* and *mridu* (oily and soft) qualities of *Sneha* in *Anuvasana Basti* counteract the *ruksha* and *khara* properties of the lesions, while the *sandhra*, *sthira*, and *mridu* gunas of *Sneha* calm the *chala* (mobile) nature of *Vata*, preventing further lesion spread. Administering *Sneha Basti* after *Niruha Basti* reduces aggravated *Vata* and nourishes the body, enhancing *varna* (complexion), strength, and overall vitality. It also provides *manaprasadanam* (mental calm), which is crucial as *Kitibha Kushta* is a psychosomatic disorder. The nourishing effect of *Anuvasana Basti* is similar to watering a plant, benefiting the entire body from *keshagra* (hair) to *nakhagra* (nails), and is particularly effective in treating diseases caused by *Vata* or *Vata-dominant Sansrita Dosha*.

By the administration of *Panchatikta Niruha Basti*, *Kashaya Basti Dravyas* mixed with *ghrita* are readily absorbed into the rectum due to the lipid soluble nature. As the rectum has rich blood and lymph supply, large quantity of *Niruha Basti Dravya* can cross the rectal mucosa and are carried by the superior haemorrhoidal vein into the portal circulation. In case of the *Anuvasana Basti*, the quantity is less and may not be able to cross the upper rectum. It may have been absorbed directly into the systemic circulation through the middle and inferior haemorrhoidal veins, which drain the lower rectum. Honey contains sucrose and enzymes, *Saindhava lavana* contain sodium chloride and other ions, which helps in generating action potential. Salt helps in electrolyte exchange. The *Sharshapa Kalka* may induce colonic distension which produces reflex release of catecholamine. The pressure of the plasma proteins exceed hydrostatic pressure of the capillary blood pressure, which may help in the absorption of drugs into the blood stream. The rate of absorption increases in proportion to the increased intra-intestinal pressure. The maximum tolerated volume of the rectum varies from 200ml to 500ml. The rectum can accommodate up to 300ml without any marked change in intra-luminal pressure. Volumes higher than these result in a rise in pressure volumes and this is associated with the frequency of urgency to defecate. In this mean time the drug may be absorbed into the systemic circulation. Hence it is known that Basti has systemic effect.

**Drug effect:**

The Panchatikta Niruha Basti preparation includes several potent herbs with distinct therapeutic properties for managing Kitibha Kushta. Patola (Patola Phala) has tikta and katu rasa, with ruksha and chala guna, and acts as kushtaghna and kandughna, helping to reduce skin inflammation. Nimba (Neem) with tikta and kashaya rasa, sheeta virya, serves as a rakta prasadaka, reducing raga, and has shothahara and kushtaghna properties, thanks to compounds like azadirachtin and nimbin. Bhunimba has tikta rasa, laghu and ruksha guna, acting as a rakta shodhaka and shothara, with andrographolides reducing skin hyperproliferation. Rasna has ushna virya and katu vipaka, alleviating ruksha and kharasparsha due to its vata-kaphahara properties, with flavonoids and saponins enhancing circulation and reducing inflammation. Saptaparna with tikta and kashaya rasa balances kapha and pitta, supporting srotoshodhana and reducing inflammation, with compounds like alstonine and quercetin providing immunomodulatory and antioxidant effects. Madhu (Honey), with its madhura rasa and snigdha guna, promotes skin health and ropaka property, reducing kharata and improving hydration. Saindhava Lavana provides srotoshodhana and kandughna effects, with its ushna virya and mineral-rich composition nourishing and detoxifying the skin. Finally, Sarshapa Kalka, with its katu rasa and ushna virya, acts as a kledaharna and kushta ghna, with glucosinolates and isothiocyanates supporting immune modulation and reducing inflammation. These herbs work synergistically to alleviate psoriasis symptoms by reducing inflammation, improving circulation, and promoting skin regeneration.

## CONCLUSION:

Basti is the ideal treatment for Vata-pradhana Kushta like Kitibha, Among 30 cases Significant improvements were observed in Kandu, Shyava Varna, Drudata, Scaling, and Thickness, with maximum PASI score reduction ( $P < 0.001$ ). No aggravation of symptoms was noted, and all Samyak Lakshana were achieved. Niruha Basti had an average retention of 5.97 minutes, while Anuvasana Basti averaged 5.72 hours, with no signs of Ayoga or Atiyoga. Overall, Panchatikta Yoga Basti showed highly significant results, with complete relief in 11 subjects, marked improvement in 27

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