

# The Effect of *Mulaka Beejadi Lepa* and *Pruthu Nimba Panchaka Churna* in the Management of *Vicharchika* W.S.R. to Eczema

## Research Article

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### Abstract

According to Ayurveda, *Vicharchika* is a major problem in skin diseases. All *Kusthas* are having *Tridoshaja* origin. The disease *Vicharchika* to a greater extent resembles eczema/dermatitis. Despite of great advance in dermatology and the advent of powerful antibiotics, antifungal as well as steroids, Eczema continues to defy the best effect of dermatologists. Hence it is the need of the hour to find out safe and effective medicine for *Vicharchika* and here comes the role of Ayurveda. The involvement of *Vata* results in dry, blackish lesion of eczema, itching in those affected areas is due to *Kapha* and *Pitta* is responsible for *Srava*. In classical texts, Ayurveda *Acharyas* emphasizes *shodhana* and *shamana* therapy as the line of treatment at various contexts. So, the study aimed to evaluate efficacy of *Mulaka beejadi lepa* and *Pruthu nimba panchaka churna* in *vicharchika*, 30 children aged 3-16years who were fulfilling the inclusion criteria and diagnostic criteria were selected from *Kaumarabhrithya* OPD and IPD of S.V. Ayurvedic College & Hospital, Tirupati. Patients were given *Mulaka beejadi lepa* as external application and *vati* prepared with *Pruthu nimba panchaka churna* 250mg BID in 3-10years age group and 500mg BID in 11-16yrs age group children for 30days and called for follow up after 15days to note any recurrence. The cases were recorded as per the case Pro forma and observations were recorded. Symptoms were scored and statistically analysed for any change before and after treatment. *Mulaka Beejadi lepa* as external application and *Pruthu Nimba panchaka churna* internally are very effective in the management of *vicharchika*.

**Keywords:** *Kustha, Vicharchika, Eczema Mulaka beejadi lepa, Pruthu nimba panchaka churna.*

### Introduction

*Ayurvedic* physicians are providing good health to human race by treating their diseases with the help of *Ayurvedic* principles since thousands of years ago. Dermatological problems are seen by pediatricians every day and comprise of around one quarter of a busy outpatient clinic (1). In *Ayurveda* all types of skin diseases have been discussed under the broad heading of *kushta* which is further divided as *Maha kushta* and *Kshudra kushta* (2). *Acharyas* considered *vicharchika* as *kshudra kushta*(3) . Different *acharyas* have defined *vicharchika* in different ways.

In *shabdha kalpa druma* the disease which coats or covers the skin in particular manner and causes cracking of skin of hands and feet mainly

As per *Acharya Charaka* the skin disease where eruptions over the skin appear with dark pigmentation, itching with profuse discharge from lesion are seen is *vicharchika*(4).

According to *Sushruta*, Disease where severe itching, severe pain, and dryness is seen is *Vicharchika* (5).

*Acharya Kashyapa* says Black, red ulcers with pain, discharges and suppuration is *Vicharchika*(6).

*Vicharchika*, according to *Ayurveda* is *Rakta Pradosaja Vikara* having involvement of *tri dosha* with dominance of *Kapha*, with symptoms of *kandu, srava, pitika, vivarnata, rukshata* (7). It can be co-related with eczema, according to allopathic view. Eczema is non-contagious inflammation of the skin characterised by erythema, scaling, edema, vesiculation and oozing. It also effects psychological status and disturb social life due to its appearance (8). It causes disturbed sleep and poor growth (9). Eczema is most common relapsing skin disease seen in infancy and childhood (10). It is slightly more common in boys than in girls (11). Now a days, modern science has advanced so much particularly in dermatology as topic is concerned and also with availability of powerful antibiotics, antifungal, antihistaminic, steroids etc., but better management is not been searched out till today.

*Ayurvedic* system of medicine is generally considered as the best for most of the skin diseases. Holistic approach of *Ayurveda* is particularly useful in treating skin diseases, which is often a manifestation of systemic illnesses. In *Ayurveda*, *Shodhana*, *Shamana* and *Nidana parivarjana* are the principle treatment for any disease. *Shaman chikitsa* is more preferable than *Shodhana chikitsa* in paediatric age group, because children have *mridu* and *sukumar* body constitution. The selected drug compounds, i.e. **MULAKA BEEJADI LEPA** and **PRUTHU NIMBA PANCHAKA CHURNA** are well indicated for *Kushta* and both act as *Shaman dravyas* in *Kustha* especially in *vicharchika*.

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### Aims and Objectives

To study the efficacy of *Mulaka Beejadi Lepa* and *Pruthu Nimba Panchaka churna* in *Vicharchika*.

To study in detail about the etiopathogenesis and prevalence of *Vicharchika* in the light of description available for *Eczema* in modern science.

### Materials and Methods

The materials and methods used and the modifications made was based on easy availability of the drugs, feasibility of the methods, available literature, traditional experiences and expert opinions.

#### *Mulaka Beejadi Lepa* (12)

Drug	Quantity
<i>Mulaka beeja</i>	1part
<i>Sarshapa</i>	1part
<i>Laksha</i>	1part
<i>Haridra</i>	1part
<i>Chakramarda beeja</i>	1part
<i>Srivestaka</i>	1part
<i>Sunti</i>	1part
<i>Pippali</i>	1part
<i>Maricha</i>	1part
<i>Vidanga</i>	1part
<i>Kusta</i>	1part

### Method

#### Preparation of *Mulaka beejadi Lepa*:

Above said *Lepa* ingredients were made into very fine powder after drying properly. *Madhucchista* and *Narikela taila* are taken as base elements for *lepa*. They are heated together and fine powder of above drugs are added to it to get *lepa* consistency. They are cooled down till it gets solidified. The *lepa* is applied on lesions.

#### *Pruthu Nimba Panchaka Churnam* (13)

Drug	Quantity
<i>Nimba tvak</i>	1part
<i>Nimba sara</i>	1part
<i>Nimba beeja</i>	1part
<i>Nimba pushpa</i>	1part
<i>Nimba patra</i>	1part
<i>Sunti</i>	1part
<i>Pippali</i>	1part
<i>Maricha</i>	1part
<i>Haridra</i>	1part
<i>Amalaki</i>	1part
<i>Hareetaki</i>	1part
<i>Vibheetaki</i>	1part
<i>Madhu</i>	Enough quantity to roll in to pills
<i>Ghrita</i>	Enough quantity to roll in to pills

### Method:

#### Preparation of *Pruthu nimba panchaka churna vati*

The above ingredients are made into fine powder. *Madhu* and *ghrita* were added to it and made it into a dough form, which does not stick to the fingers. This dough is rolled into pills of 250mg each.

### Source of data

About 30 children aged between 3-16years were randomly selected for the study from OPD and IPD of Department of *Kaumarabhrithya*, S.V. *Ayurvedic Hospital*, Tirupati.

### Selection of Patients

Total 30 patients were selected and registered from O.P.D. and IPD of department of *Kaumarabhrityam*, S. V. *Ayurvedic Hospital*, based on the inclusion Criteria and clinical features mentioned.

### Method of study

30 children aged between 3-16years were randomly selected and were treated with *Mulaka beejadi lepa* as external application and *vati* prepared with *Pruthu nimba panchaka churna* 250mg BID in 3-10years age group and 500mg BID in 11-16yrs age group children for 30days and called for follow up after 15days.

### Counselling

Counselling for both Parents and Guardian was given explaining the nature of the disease and its prognosis.

### Diagnostic criteria

For the diagnosis and assessment of *vicharchika* in children, Scoring criteria for subjective parameters, SCORAD Score were adopted.

### Inclusive Criteria

- Patients of age group 3-16 years.
- Patients with signs and symptoms of *Vicharchika*.
- Signs and symptoms of *Eczema*.

### Exclusive Criteria

- Age group > 16 years.
- Children with any other chronic skin diseases like psoriasis.
- Children with other debilitating diseases like SLE, TB
- Children under any systemic medication.
- Other types of *Kustha* that are *asadhya*.

### Drug and posology:

- Patients were given *Mulaka beejadi lepa* as external application and *vati* prepared with *Pruthu nimba panchaka churna* 250mg BID in 3-10years age group and 500mg BID in 11-16yrs age group children for 30days

### Duration:

- The period of study will be for one month.

### Follow up of the Study

- All the cases are followed up with an interval of 15days between each sitting for the progress or changes during treatment.
- Total treatment schedule was for 30 days (active trial phase). The patients were called on 45<sup>th</sup> day to note any reoccurrence.

**Assessment criteria**

**Subjective Criteria**

*Kandu, pidika, srava, rukshata, vaivarnyata, ruja, and daha* are the signs and symptoms of *vicharchika*

**Scoring criteria for subjective parameters:**

**1. Kandu (Itching)**

- 0 - No itching
- 1 - Mild itching not disturbing normal activity
- 2 - Occasional itching disturbs normal activity
- 3 - Itching present continuously and even disturbing sleep

**2. Daha (Burning)**

- 0 - No burning sensation
- 1 - Mild type of burning not disturbing normal activity
- 2 - Occasionally burning disturbing normal activity
- 3 - Burning present continuously and even disturbing sleep

**3. Srava (Discharge)**

- 0 - No discharge
- 1 - Moisture on the skin lesion
- 2- Weeping from the skin lesion
- 3- Weeping from the skin lesion followed by crusting

**4. Rukshata**

- 0 - No dryness
- 1 - Dryness with rough skin (Ruksha)
- 2 - Dryness with scaling (Khara)
- 3 - Dryness with cracking (Parusha)

**5. Pidika**

- 0- No eruption in the lesion
- 1- Scanty eruptions in few lesions
- 2- Scanty eruptions in at least half of the lesion
- 3- All the lesions full of eruption

**6. Vaivarnyata**

- 0 - Nearly normal skin color
- 1 - Brownish red discoloration
- 2 - Blackish red discoloration
- 3 - Blackish discoloration

**Objective Criteria**

- Absolute Eosinophil count.
- SCORAD International scoring system

**Criteria for overall assessment**

Total effect of therapy on 30 patients of *vicharchika* was calculated by taking the mean of % of relief.

- Cured – Patients showing 100% improvement in signs and symptoms have been considered as cured.
- Complete Remission – Patients showing more than 61-99% average improvement in the Signs and Symptoms have been considered as complete remission.
- Marked improved – the patients showing improvement in between 41-60 % in Signs and Symptoms has been considered as Marked improved.
- Partially improved – the patients showing improvement in between 25-40 % in Signs and Symptoms has been considered as Mild improved.
- Unchanged – no change or less than 25% improvements in Signs and Symptoms have been considered as unchanged.

**Observation:**

Among 30 patients *completed* the treatment and follow up. Maximum number of children's belongs to 11-15 years of age group (56.66%), Male child (66.66%), resident of *Jangala desha* (80%), Hindu religion (86.66%), *Mandagni* (46.67%), mixed diet (90%), *Vata Pradhana Prakruti* (43.33%), *Madhyama Samhanana* (66.67%), poor socioeconomic class (50%) and maximum number of patients consumed more *Katu, Lavana* and *Amla Ras* i.e. 73.33%, 70%, 66.67% respectively, family H/o allergy (46.67%) and eczema (43.33%). The symptoms of *Vicharchika* like *Kandu* (100%), *Vaivarnya* (100%), *Pidika* (56.66%), *Rukshata* (53.33%), *Srava* (46.66%), *Daha* (40%), *Ruja* (16.67%) and *Rajyo* (16.66%).

**Results**

**Effect of therapy on subjective and objective parameters**

*Extremely significant results (P <0.001) were found in parameters like Kandu, Vaivarnya, Rookshata, Pidika, Srava and decrease in SCORAD scoring, A.E.C. (absolute Eosinophil count). Significant (P <0.01) results were noticed in Ruja and very significant result for Daha.*

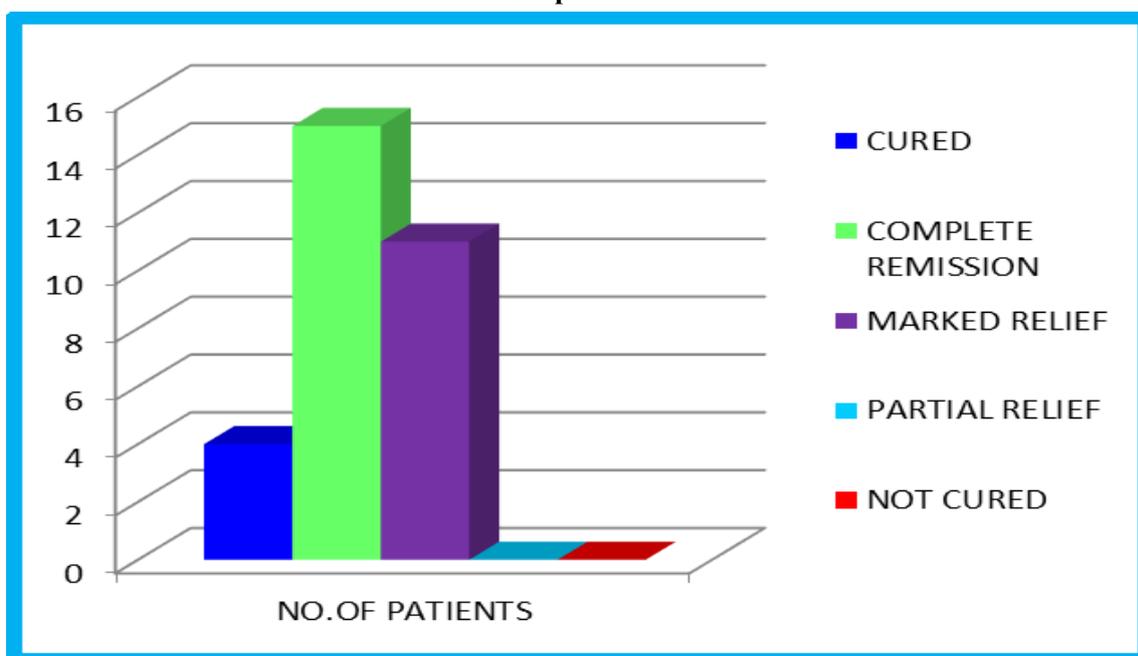
**Table No:1 Showing Effect of therapy on subjective and objective parameters**

Parameters	n	Mean		%of relief	SD		t	P
		BT	AT		BT	AT		
<b>Itching (Kandu)</b>	30	2.00	0.43	80%	0.74	0.50	12.6393	<0.001
<b>Eruption (Pidika)</b>	30	1.13	0.40	61.76%	1.11	0.56	5.4302	<0.001
<b>Discharge (Srava)</b>	30	1.23	0.43	64.86%	1.33	0.63	4.9418	<0.001
<b>Dryness (Rukshata)</b>	30	0.97	0.37	62.06%	1.10	0.56	4.8711	<0.001
<b>Discolouration (Vivarnata)</b>	30	1.80	0.60	66.66%	0.71	0.62	9.8932	<0.001
<b>Pain (Ruja)</b>	30	0.30	0.07	77.77%	0.75	0.25	2.2488	0.323
<b>Burning sensation (Daha)</b>	30	0.80	0.30	62.5%	1.03	0.60	3.5254	0.014
<b>AEC</b>	30	726.23	451.30	37.28%	132.70	113.08	11.7857	<0.001
<b>SCORAD</b>	30	36.463	13.737	62.33%	8.441	8.828	15.5347	<0.001

**Table No 2 Showing Overall assessment of therapy**

Overall assessment	No.of patients	Percentage
<b>Cured</b>	4	13.33%
<b>Complete remission</b>	15	50%
<b>Marked relief</b>	11	36.66%
<b>Partial relief</b>	0	0%
<b>Not cured</b>	0	0%

**Graph No:1**



In a sample of 30 patients, maximum patients were having complete remission i.e., 50%, 36.66% of patients show marked relief, and 13.33% patients show complete cure.

### Discussion

*Vicharchika* is one of the chronic skin diseases. Atopic dermatitis or Eczema is the most common relapsing skin disease seen in infancy and childhood. It affects 10-30% of children worldwide and frequently occurs in families with asthma, allergic rhinitis, and food allergy (14).

*Vicharchika* has been mentioned in almost all *Ayurvedic texts*, either in form of *Kshudra Kustha* or *Sadhya Kustha*.

Various *Acharyas* mentioned *Vicharchika* with different *Doshic* involvement of vision of their symptomatological complex. Charka says that *Vicharchika* has a *Kapha* dominancy, because there is an excess *Kandu* (itching), *vivarnata* (discoloration), *Pidika* (boil), *srava* (profuse oozing), which also indicates its initial or acute stages.

Characteristics like *Raji* (marked lining) and *Arti* (pain) and *Ruksha* (dryness) etc., which indicate chronic or later stage. Thus, this separation may also suggest different stage of disease *Vicharchika*.

In initial stage of *Vicharchika* when pruritus may be severe, ultimately skin intactness may rupture and water discharge may produce which is also mentioned by *Vagbhata* that *Vicharchika* has a characteristic like *Lasikadhya* while *Indu* explained it with *Jalapraya* i.e. watery discharge.

The symptomatology of *Vicharchika* is similar with Eczema i.e., *Sakandu* (excessive itching), *Pidika* (papule/pustule/vesicle), *Shyava* (discoloration/hyper pigmentation), *Bahusrava*<sup>1</sup> (profuse oozing) and later *Raji* (marked linings/lichenification/Cris-cross marking), *Ruja* (pain), *Saruksha* (excessive dryness).

The etiopathogenesis is also similar to Eczema i.e. *Viruddha*, *Mithya Ahara* and *vihara* and other *nidana* may act as metabolic toxins or other irritant and produce sensitization of skin.

After above discussion it can be said that *Vicharchika* is a clinical entity in which the lesion has been *Shyava* colored of *Pidika* with excessive itching and oozing, which may develop anywhere in the body, either wet or dry.

Eczema can be considered in same category because first manifestation of eczema is erythema or reddening of skin, edema, vesiculation, oozing, crusting and later lichenification. Due to the intra and extra environmental changes in body and its reactions against them, may produce extreme stage of *Vicharchika*.

Main place of etiopathogenesis, which has been in *Tvak* (*Adhithana*), *Rakta* (blood and lymph), *Mamsa* (deep cutaneous tissue) and *Lasika* (sweat gland apparatus).

## Probable Mode of Action

### Mulaka Beejadi Lepa

*Vicharchika* is a *kapha* predominant disease. Most of the drugs used in the formulation have *katu*, *tikta rasa*, *laghu*, *ruksha teekshna guna*, *ushna veerya* and *katu vipaka*. These properties of drugs helps in alleviating *kapha* and *pitta dosha*.

All the drugs in combination having *Kushtaghana*, *Kandughana*, *Krimighna*, *Rasayana* and also *Varnya*, *lekhana*, *daha prashamana* properties.

*Mulaka Beeja* reduces the dryness of the skin, cracks and moisturizes the skin from inside. thus reducing the *rukshatva guna* in *vicharchika*(15). Presence of sulphur compound in *Mulaka Beeja* possess *Kitari*, *Pamari*, *Kusthaghna* properties(16).

*Sarshapa* shows *Vedana sthapana* property. Anti-ulcerogenic and wound healing property of *Laksha* helps in healing of the lesions(17).

*Lekhania* *guna* of *haridra* is useful for reduction of thickness of skin and *vaivarnyata* in the disease.

The *srava* in *vicharchika* is controlled by *Sleshma puti hara*, *Vrana shodaka* and *Dusta Vrana hara* properties of *Srivestaka*(18). Anti oxidant, *Kandughna*, *Krimighna*, *Dadru hara* and *Lekhana* properties of *Chakramarda Beeja* helps in alleviating *Kandu*, *pidika* symptoms of the disease. *Thrachryson* isolated from seeds showed stronger anti-oxidant activity(19).

*Trikatu* helps as *shula hara*(*ruja*). Blood purifying and, wound healing properties of *Vidanga* shows *kusthaghna* action on skin(20). Wound healing activity of *embelin* isolated from the ethanol, extract of leaves of *embelica ribesburn*(21).

*Varnya* property of *kusta* drug reduces discolouration(*vivarnata*) of the skin. . *Melanogenesis* inhibitory compounds from *saussureae Radix*(22)

*Mahucchista* having *vrana ropana* property acts as *kusthaghna*.

*Narikela taila* improves skin hydration, *lauric acid* present in *narikela taila* possess *bactericidal*, *fungicidal* and *anti-inflammatory* properties.

Recent research work shows that these drugs are having potent *Anti-allergic*, *Anti-inflammatory*, *Immunomodulatory*, *chemo protective*, *Anti-bacterial*, *Anti-oxidant*, *Anti-ulcerogenic*, *Anti-microbial* and *Anti-fungal* properties.

### Pruthu Nimba Panchaka churna

*Nimba* having *tikta*, *kashaya rasa*, *laghu guna*, *sheeta veerya*, *katu vipaka* shows *pitta shamaka* *kaphaghna*, *vrana ropana*, *krimighna*, *kandughna*, *daha prashamana*, *rasayana* properties.

*Neem bark and leaf* shows *Anti-inflammatory*, *Anti-bacterial* and *Anti-fungal* properties. *Neem seed* shows *anti leptotic*, *Anti-helmenthic* properties.

*Neem flowers* are used in *vitiated conditions* of *pitta* and *kapha*. it has *anti helmenthic* property.

*Neem gum* is reported to be useful in *treatment* of *skin diseases*. *Nimba* has *Vrana shodhaka* property.

A plant derived wound therapeutic for *cost-effective treatment* of *post-surgical scalp wounds* with *exposed bone*(23)

*Sroto shodaka* property of *Maricha* and *Haritaki* helps in *proper circulation* and *nourishes the tissues*.

*Pippali* acts as *kaphaghna* due to its *Deepana*, *Pachana* and *Ama dosha hara* property. *Anulomana guna* of *hareetaki*, *Sunti* and *Vibheetaki* alleviates *Pitta dosha*, one of the *vitiated doshas* in *vicharchika*. *Maricha* acts as *shula hara*, *Amalaki* act as *Rakta shodaka* as well as *Daha prashamana*.

*Triphala* having *rechaka* property alleviates *pitta dosha*.

*Go ghrita* having *madhura rasa guru guna* *sheeta veerya katu vipaka* alleviates *vata* and *pitta doshas* and shows *kusthaghna* property.

*Madhu* having *madhura kashaya rasa guru guna*, *sheeta veerya*, *katu vipaka* alleviates *Tridoshas* and shows *lekhana*, *shodana*, *Anti-inflammatory*, *Anti-oxidant* and *Anti-fungal* properties.

These drugs are also having *Raktashodhaka* and *Raktaprasadana* properties, because of *Tikta* and *Kashaya rasa* dominance, *Rakta* is one of the main *dushya* in *tvak vikara*. These properties have direct positive effect on *Tvak dhatu*.

## Conclusion

The experiment clearly concludes that *Mulaka beejadi lepa* and *pruthu nimba panchaka churna* for external application could be a remedy for *Vicharchika* and can be used in other *Kustha* also especially *Kaphaja-pittaja kusthas* explained in the classic texts without any side effects. It will be a panacea for many of the skin problems. Thus the clinical study clearly concludes that this should be a best remedy.

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