

# Efficacy of *Durvadya Taila* and *Laghu Manjisthadi Kwatha* in *Vicharchika* (Eczema) in Children

## Research Article

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### Abstract

*Vicharchika* is a type of *Kshudra kushtha* often encountered by Ayurvedic Pediatric OPDs characterized by symptoms namely *Kandu* (itching), *Srava* (discharge), *Pidaka* (vesicles), and *Shyava Varna* (discoloration). The involvement of *Vata* results in dry, blackish lesions of eczema, itching in the affected areas is due to *Kapha* whereas *Pitta* is responsible for *Srava*. *Vicharchika* has a greater resemblance with Eczema. Ayurveda classics emphasize *Shodhana* and *Shamana* therapy as the line of treatment at various places in the management of *Kushtha*. In children *Shamana* therapy is preferred over *Shodhana* therapy. So, a clinical study aimed to evaluate the efficacy of *Durvadya Taila* and *Laghu Manjisthadi Kwatha* in *Vicharchika* in children aged 5-16years was conducted considering inclusive and exclusive criteria. Patients were given *Durvadya Taila* for external application and *Laghu Manjisthadi Kwatha* internally for 45days twice a day and called for follow up after 15 days of completion of treatment. Among 30 patients, maximum patients were having moderate improvement i.e. 86.67%, 6.67% of patients showed complete remission and 6.67% showed mild improvement. The clinical study clearly concludes that *Durvadya Taila* and *Laghu Manjisthadi Kwatha* are safe and effective in the Management of *Vicharchika* in children.

**Key Words:** *Vicharchika*, Eczema, *Kushtha*, *Durvadya Taila*, *Laghu Manjisthadi Kwatha*.

### Introduction

The skin is the most visible organ of the body and determines to a large extent, our appearance, with a wide function in physical, social and psychological communication. The skin function is hampered with the occurrence of skin diseases. 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 *Kushtha* which is further divided as *Maha Kushtha* and *Kshudra Kushtha*. *Vicharchika* is one of the *Kshudra Kushtha*.

According to *Acharya Charaka*, The skin disease where eruptions over the skin appear with dark pigmentation, itching with profuse discharge from lesion is *Vicharchika* (2). According to *Acharya Sushruta* severe itching, severe pain and dryness is seen is *Vicharchika* (3). As per *Acharya Kashyapa* presence of Black, red ulcers with pain, discharges and supuration over skin is *Vicharchika* (4).

*Vicharchika* can be compared to eczema. Eczema is noncontagious inflammation of the skin characterized by erythema, scaling, edema, vesiculation and oozing. Eczema, also known as atopic dermatitis, involves inflammation of the skin. The condition is characterized by scaly or crusty patches of skin, often accompanied by redness, blistering, and itching. Eczema is most common relapsing skin disease seen in infancy and childhood (5).

The vitiated three *doshas*- *vata*, *pitta*, *kapha* along with impaired *tvak*, *rakta*, *mamsa* and *ambu* together constitute seven essential entities which play role in pathogenesis of this skin disorder and *Kapha* is the predominant *dosha* involved in *Vicharchika* (6).

In maximum of cases, patients of *Vicharchika* (Eczema), who do not get much benefit from the treatment of modern medicine, come to *Ayurveda* treatment with a great hope for cure of the disease.

In *Ayurveda* *Shodhana*, *Shamana* and *Nidana parivarjana* are the treatment principle for any disease. *Shamana Chikitsa* is more preferable than *Shodhana chikitsa* in pediatric age group, because children have *mridu* and *sukumara* body constitution. In the present study the selected drug compounds i.e. *DURVADYA TAILA* and *LAGHU MANJISTHADI KWATHA* are well indicated for *Kushtha* and both act as *Shamana dravyas* in *Vicharchika*.

### Aims and objectives

To study the efficacy of *Durvadya taila* and *Laghu Manjisthadi Kwatha* in *Vicharchika*.

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## 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.

### Ingredients of *Durvadya tailam* (7)

Drug	Quantity
<i>Durva (Swarasa)</i>	4 parts
<i>Tila taila</i>	1 part

### Preparation of *Durvadya Taila*

Take *Tila taila* in given quantity. Mix it with 4 parts of *Durva swarasa*. Keep it on *mandagni* till it attain *Sneha Siddhi lakshanas*. Cool it and filter. This *taila* is applied over lesions.

### Ingredients of *Laghu Manjisthadi Kwatha* (8, 9)

Drug	Quantity
<i>Manjistha</i>	1 part
<i>Triphala</i>	3 parts
<i>Katuki</i>	1 part
<i>Vacha</i>	1 part
<i>Daruharidra</i>	1 part
<i>Harithaki</i>	1 part
<i>Nimba</i>	1 part

### Preparation of *Laghu Manjisthadi Kwatha*

All stipulated drugs were taken in equal quantity, washed and dried well and then made into coarse powder. It was made into *kwatha* by boiling with water during time of administration.

### Source of data

About 30 patients aged between 5-16 years were randomly selected from OPD and IPD of department *Kaumarbhritya*, S.V. *Ayurvedic Hospital*, Tirupati.

### Selection of Patients

Total 30 patients were selected and registered from OPD and IPD of department *Kaumarbhritya*, S.V. *Ayurvedic Hospital* based on inclusion criteria and clinical features mentioned.

### Method of Study

30 patients aged between 5-16 years were randomly selected and were treated with *Durvadya Taila* as external application and *Laghu Manjisthadi Kwatha* of 10-15 ml for children in age group of 5-10 years and 15-25ml for children in age group of 11-16yrs was given twice in a day internally for 45 days and called for follow up after 15days.

The dose was calculated according to Young's formula keeping in the mind the adult dose of *kwatha*

$$\text{Children dose} = \frac{(\text{Adult dose age} \times \text{in years})}{(\text{Age in years} + 12)}$$

## Diagnostic Criteria

For the diagnosis and assessment of *Vicharchika*, Scoring criteria for subjective parameters and SCORAD Score were adapted.

### Inclusive Criteria

- Children age grouped between 5 -16 years.
- Children with signs and symptoms of *Vicharchika*.
- Children with signs and symptoms of Eczema.

### Exclusive Criteria

- Children with any other chronic skin diseases like Psoriasis and other types of Kustha.
- Children with other debilitating diseases like SLE, TB.
- Children under any systemic medication.

## Drug and posology

*Durvadya Taila* was applied over the affected part twice in a day and *Laghu Manjisthadi Kwatha* of 10-15 ml for children in age group of 5-10 years and 15-25ml for children in age group of 11-16yrs was given two times/day i.e. morning and evening.

## Duration and follow up of the Study

- The period of study was for 45 days.
- All the cases are followed up with an interval of 15days between the study period for progress or changes during treatment.
- After active trail period i.e. 45days, the patient were called on 60th day to note any reoccurrence.

## Assessment criteria

### Subjective Criteria

*Kandu* (itching), *Daha* (burning), *Srava* (discharge), *Rukshata*, *Pidikotpatti*, *Vaivarnata*, *Ruja* are the signs and symptoms of *Vicharchika*.

### Scoring criteria for subjective parameters:

#### 1. *Kandu* (itching)

- 0- No itching
- 1- Itching present rarely
- 2- Itching disturbing patient attention
- 3- Itching present continuously and even disturbing sleep

#### 2. *Daha* (burning)

- 0- Absence of *Daha*
- 1- Rarely burning sensation in the affected area
- 2- Continuous burning sensation in the affected area
- 3- Burning present continuously and even disturbing patient sleep

#### 3. *Srava* (discharge)

- 0- No discharge
- 1- Occasional *Srava* after itching
- 2- Mild *Srava* after itching
- 3- Profuse *Srava* making clothes wet

#### 4. *Rukshata*

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

### 5. *Pidikotpatti*

- 0- Absent
- 1- Scanty eruptions in few lesions
- 2- Scanty eruptions in at least half the lesions
- 3- All the lesions full of eruption

### 6. *Vaivarnata*

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

### 7. *Ruja*

- 0- No pain
- 1- Occasionally pain
- 2- Mild to moderate pain
- 3- Severe pain

### Objective Criteria

- Absolute Eosinophil count
- SCORAD international scoring system - SCORAD is a clinical tool used to assess the extent and severity of eczema (Scoring Atopic Dermatitis). The SCORAD system has been developed based on consensus by the European Task Force on Atopic Dermatitis (ETFAD). ETFAD consists of a group of more than 20 dermatologists with much expertise in paediatric dermatology. The acronym SCORAD was proposed by Arnold Oranje, and stands for SCORing Atopic Dermatitis (10). It is a good tool to determine whether treatment has been effective by applying it before and after treatment. This score having 3 components where- Area, Intensity, Subjective symptoms

#### A. Area

To determine extent, the sites affected by eczema are shaded on a drawing of a body. The rule of 9 is used to calculate the affected area (A) as a percentage of the whole body.

- Head and neck 9%
- Upper limbs 9% each
- Lower limbs 18% each
- Anterior trunk 18%
- Back 18%
- 1% for genitals
- The score for each area is added up. The total area is 'A', which has a possible maximum of 100%.

#### B. Intensity

A representative area of eczema is selected. In this area, the intensity of each of the following signs is assessed as none (0), mild (1), moderate (2) or severe (3).

- Redness
- Swelling
- Oozing/crusting
- Scratch marks
- Skin thickening (lichenification)
- Dryness (this is assessed in an area where there is no inflammation)
- The intensity scores are added together to give 'B' (maximum 18)

### C. Subjective symptoms

- Itching and sleeplessness these are 2 subjective symptoms.
- These are each scored by the patient or relatives using a visual analogue scale where '0' is no itch or no sleeplessness and '10' is the worst imaginable itch or sleeplessness.
- These two scores are added to give 'C' (maximum 20)

### Total score

- This is obtained by calculating the above mentioned 3 components using below formula  
Total score = A/5+7B/2+C

### Criteria for overall assessment

Total effect of therapy on 30 patients of *Vicharchika* was calculated by taking the mean of percentage of relief

- Cured – Patients showing 99% improvement in signs and symptoms have been considered as cured.
- Complete Remission – Patients showing 76-98% average improvement in signs and symptoms have been considered as complete remission.
- Moderate improved – Patient showing improvement in between 51-75% in signs and symptoms have been considered as marked improved.
- Mild improved – Patient showing improvement in between 26-50% in signs and symptoms have been considered as mild improved.
- Unchanged – No change or less than 25% in signs and symptoms have been considered as unchanged.

### Observations

Among 30 patients who completed the treatment and follow up maximum number of patients belong to the Age group of 5-7yrs (33.33%) and 11-13yrs (33.33%), Male children (63.33%), resident of *Jangala desha* (90%), Poor socio economic status (53.33%), mixed diet (90%) *Vatapittaja Prakruti* (46.67%). Maximum patients with intake of *Lavana*, *Amla* and *Katu rasa* i.e. 83.33%, 80% and 66.67% respectively, has past illness H/o persistent or relapsing dermatitis (43.33%), Family H/o eczema (33.33%) and Gradual onset (53.33%).

The symptoms of *Vicharchika* like *Kandu* (100%), *Daha* (46.67%), *Srava* (40%), *Rukshata* (60%), *Pidaka* (86.67%), *Vaivarnata* (100%), *Ruja* (10%) has been observed.

### Results

Extremely significant results ( $P < 0.001$ ) were found in parameters like *Kandu*, *Daha*, *Srava*, *Rukshata*, *Pidika*, *Vaivarnata*, SCORAD Score and AEC. Highly significant results ( $P < 0.005$ ) were found in *Ruja*.

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

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

Parameters	Mean		Mean difference	% of relief	SD		t	P
	BT	AT			BT	AT		
Kandu	2.33	0.37	1.97	84.12%	0.61	0.09	19.37	<0.0001
Daha	0.83	0.03	0.80	96.38%	0.91	0.18	4.9418	<0.0001
Srava	1.07	0.1	0.97	90.65%	0.78	0.31	7.3701	<0.0001
Rukshata	1.8	0.33	1.47	81.67%	0.55	0.48	15.8317	<0.0001
Pidika	2.33	0.33	2.00	85.83%	0.76	0.48	17.0294	<0.0001
Vaivarnata	2.07	0.83	1.23	59.90%	0.78	1.02	8.7293	<0.0001
Ruja	0.3	0	0.30	100%	0.53	0	3.0714	0.0046
SCORAD score	40.6	14.60	25.997	64.04%	13.87	4.99	12.4264	<0.0001
AEC	646.53	406.03	240.50	37.20%	103.49	63.65	18.518	<0.0001

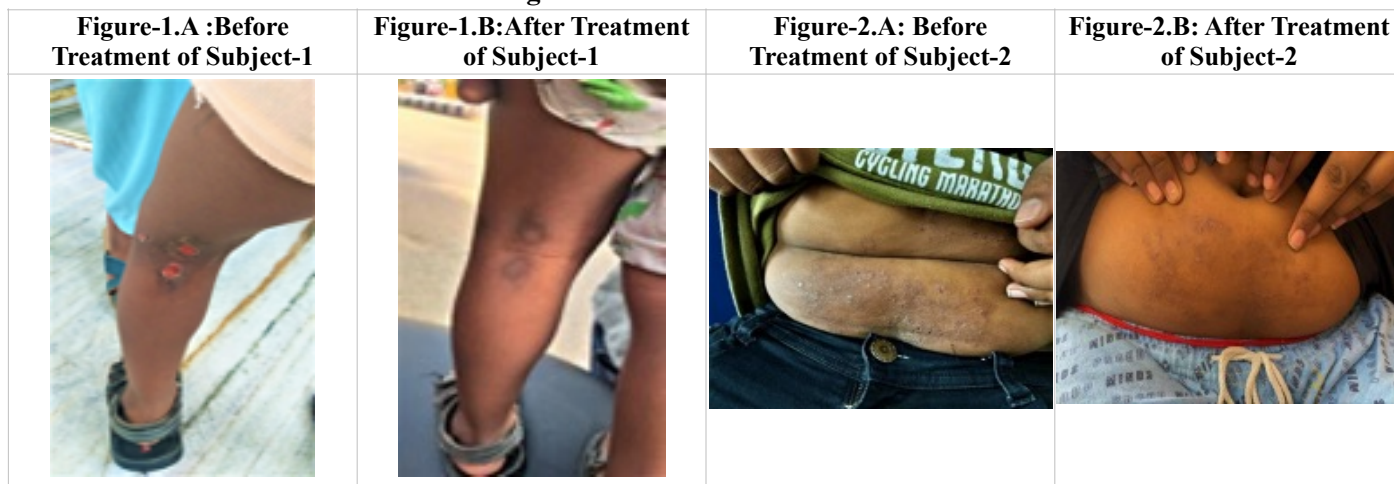
**Table No.2 Showing overall Assessment**

Overall assessment	No. of patients	Percentage
Cured	0	0%
Complete remission	2	6.67%
Moderate improvement	26	86.67%
Mild improvement	2	6.67%
Unchanged	0	0%

Among 30 patients, maximum patients were having moderate improvement i.e. 86.67%, 6.67% of patients showed complete remission and 6.67% showed mild improvement.

**Graph No.1:**  
Overall assessment

**Images of before and after treatment**



**Discussion**

Vicharchika is one of the chronic skin diseases. Vicharchika has been mentioned in all Ayurvedic texts under Kshudra kustha. It has been considered as Sadhya Kustha by Acharya Kashyapa (11).

Acharya Charaka considered Vicharchika as Kapha dominant disease, because there is Kandu, Shyava, Pidika, and Bahusrava, which also indicates its acute or initial stage. Chronic or later stage has characteristics like Raji, Arti and Saruksha. Thus this separation may also suggest different stage of disease Vicharchika.

Vicharchika can be correlated with Eczema as they are having similar symptomology. It was observed that similar causes, signs and symptoms are described in

modern texts as found in Ayurvedic terminology like Sakandu (Excessive Itching), Pidika (Eruptions), Ruja (Pain), Bahu Srava (Profuse oozing), Vaivarnata/Shyava (Discolouration), Saruksha (Excessive dryness), Raji (Lichenification).

**Probable Mode of Action  
Durvadya Taila**

Durva having Kashaya, Madhura rasa, Laghu guna, Sheeta Virya, Madhura Vipaka shows Kapha pitta hara, Varnya, Vranaropana properties. It has been proved to have wound healing (12) and Anti-inflammatory (13) activity. Wound healing activity of Durva helps in reducing lesions.

Tila taila having Madhura, Kashaya, Tikta rasa, Ushnavirya Madhura Vipaka alleviates Vata and Pitta

*dosha* and acts as *Tvachya* and *Varnakara*. As it has *Snigdha guna* it helps to reduce dryness of skin, cracks and moisturize the skin thus helps in reducing the *Rukshatva guna* in *Vicharchika*.

### Laghu Manjisthadi Kwatha

*Laghu Manjisthadi Kwatha* is a combination of 8 drugs. All the key ingredients of this *kwatha* are having *Tridosahara* properties, especially *Kaphapittahara* property, which is main *dosha* involved in pathogenesis of *Vicharchika*.

*Vicharchika* is a *Kapha* predominant disease. Most of the drugs used in this formulation have *Tikta*, *Kashaya rasa*, *Laghu*, *Ruksha guna*, *Ushna virya* and *Katu vipaka*. These properties of drugs helps in alleviating *kapha* and *pitta dosha*. All the drugs in combination having *Kustaghana*, *Kandughana*, *Krimighna*, *Rasayana* and also *Varnya*, *Lekhana*, *Dahaprashamana* properties.

Most of the drugs of stipulated *yoga* are having *Tikta rasa* which works on *Amashaya* and treat *Ama* condition, finally improve *Agni* and helps in *Srotoshuddhi*. Due to dominance of *Tikta* and *Kashaya rasa* these drugs have *Raktashodhaka* and *Raktaprasadana* properties. As *rakta* is one of the main *dushya* in *Tvak vikara* these properties have direct positive effect on *Kandu*, *Daha*, *Vaivarnata*, *Pidika* and *Srava*.

*Raktasodhaka* and *Vranashodhana* properties of *Manjistha* and *Daruharidra* shows *Kustaghana* action and helps in wound healing. These drugs have been proved to have wound healing effect (14, 15). *Srotoshodhaka* property of *Harithaki* helps in proper circulation and nourishes the tissues and it has anti-allergic effect (16). *Katuki* helps for elimination of *dushta pitta* and correct *raktadushti*.

*Varnya* property (17) of *Manjistha*, *Daruharidra*, *Amalaki*, *Nimba* and *Harithaki* helps in reducing discolouration of the skin. *Lekhaniyaguna* of *Daruharidra* and *Katuki* is useful for reduction of thickness of skin and *Vaivarnata* in the disease.

*Rasayana karma* of *Manjistha*, *Daruharidra*, *Amalaki* and *Harithaki* helps in reducing the reoccurrence of *Vicharchika*. *Rasayana* drugs are used for preservation of good health because they have antioxidant and immunomodulatory effects.

**Table No: 3 Showing Research works done on above drugs**

Drugs	Pharmacological Activity
Manjistha	Anti-inflammatory activity(18), Anti-oxidant activity(19), Immunity enhancing activity(20)
Amalaki	Immunomodulatory(21), Anti-oxidant(22), Anti-inflammatory(23)
Harithaki	Immunomodulatory (24), Anti-inflammatory (25)
Vibhitaki	Immunomodulatory (26)
Katuki	Anti-microbial (27), Immunomodulatory (28), Antioxidant activity (29), Anti-inflammatory (30)

Charaka told that *Vibhitaki* has potency of curing all the diseases, which arise due to *Rasa*, *Rakta*, and *Mamsadhatudushti*. So by this we can conclude it works on *Rasavaha*, *Raktavaha* and *Mamsavahasrotas* as in pathogenesis of *Vicharchika* mainly these *srotas* are mainly involved or affected. *Nimba*, *Amalaki* especially have *Dahaprashamana* property which helps in reducing *Daha* condition of *Vicharchika*.

All these properties will help in reducing the symptoms of *Vicharchika* i.e. *Kandu*, *Vaivarnata*, *Pidika*, *Rukshata*, *Srava*, *Daha*, and *Ruja* and finally in breaking the pathogenesis of *Vicharchika*.

### Conclusion

The clinical study clearly concludes that *Durvadya Taila* for external application and *Laghu Manjisthadi Kwatha* internally could be a remedy for *Vicharchika* and can be used in other *Kustha* also especially *Kaphaja-Pittaja Kusthas* explained in classic texts without any side effects. Disease prognosis is better in acute stage, than chronic stage. So early diagnosis and treatment is essential. For complete cure of *Vicharchika* especially in chronic cases, long duration of treatment with *Durvadya Taila* and *Laghu Manjisthadi Kwatha* is necessary.

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