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A Comparative Clinical Evaluation of Shwet Karveeradi Tail and Shwet Karveeradi Lepa in the Management of Garvishjanya Vicharchika (Eczema)

Dr. Vishal Jambhulkar[1], Dr, Ashwini Patil[2], Dr. Houserao Patil[3]

[1]M.D. Scholar, Department of Agadtantra and Vyavahar ayurved, Lokanete Rajarambapu patil Ayurvedic Medical College, Hospital, Post Graduate Institute and Research Center, Islampur
[2]Professor, Department of Agadtantra and Vyavahar ayurved, Lokanete Rajarambapu patil Ayurvedic Medical College, Hospital, Post Graduate Institute and Research Center, Islampur .
[3]Professor & H.O.D., Department of Agadtantra and Vyavahar ayurved, Lokanete Rajarambapu patil Ayurvedic Medical College, Hospital, Post Graduate Institute and Research Center, Islampur .

Abstract:
Background: Vicharchika, described under Kushtha in Ayurveda, closely resembles eczema in modern dermatology. The condition is characterized by itching, oozing, eruptions, discoloration, and dryness, often aggravated by Gara Visha (artificial toxins). Classical Ayurvedic texts advocate external therapies such as Shwet Karveeradi Taila and Shwet Karveeradi Lepa for such dermatoses.
Objective: To evaluate and compare the clinical efficacy of Shwet Karveeradi Tail and Shwet Karveeradi Lepa in patients suffering from Garvishjanya Vicharchika w.s.r. to Eczema.
Methodology: A randomized comparative clinical study was conducted on 70 patients, divided equally into two groups. Group A received Shwet Karveeradi Tail application, while Group B received Shwet Karveeradi Lepa. Assessment was done using subjective parameters (Kandu, Pidika, Srava, Rukshata, Vaivarnyata) and objective SCORAD index before and after treatment.
Results: Both groups showed statistically highly significant improvement ($p < 0.0001$). Intergroup comparison showed no significant difference in overall SCORAD score ($p = 0.4268$), indicating equal efficacy. Symptom-wise analysis revealed better improvement in Rukshata and Vaivarnyata with Tail, while Pidika showed faster relief with Lepa.
Conclusion: Both formulations are effective and safe. Shwet Karveeradi Tail is preferable in chronic dry lesions, whereas Shwet Karveeradi Lepa is more effective in acute, oozing conditions.

Keywords: Vicharchika, Eczema, Garvisha, Shwet Karveeradi Tail, Shwet Karveeradi Lepa

Introduction

In recent years, rapid lifestyle changes and increased environmental exposure have led to a noticeable rise in skin disorders. Unhealthy dietary habits such as consumption of processed foods, excessive use of chemical-based cosmetics, exposure to fertilizers, insecticides, and industrial pollutants, along with lifestyle factors like irregular sleep, frequent travel, and prolonged air-conditioned environments adversely

affect skin health . These factors disturb the internal doshic balance, predisposing individuals to various dermatological conditions.

In Ayurveda, skin diseases are classified under Kushtha, further divided into Maha Kushtha and Kshudra Kushtha. Vicharchika, a type of Kshudra Kushtha, is commonly associated with Garvishaja conditions caused by toxin accumulation and incompatible dietary practices (Viruddha Ahara). It involves tridoshic vitiation with Kapha predominance, presenting clinically as itching (Kandu), discharge (Srava), eruptions (Pitika), discoloration (Vivarnata), and dryness (Rukshata) . Classical texts by Acharya Charaka, Sushruta, Kashyapa, and others describe Vicharchika as a chronic, distressing condition with itching, oozing, dryness, and pigmentation changes.

Clinically, Vicharchika closely resembles eczema, a chronic inflammatory, non-infectious skin disorder that significantly impairs quality of life. Global Burden of Disease studies rank skin disorders among the leading causes of non-fatal disease burden worldwide. Ayurveda offers a holistic management approach through Shodhana, Shamana, and Nidana Parivarjana, along with effective external formulations such as Shweta Karveeradi Taila and Shweta Karveeradi Lepa, traditionally used for managing Vicharchika

Need of Study

The prevalence of eczema has increased markedly due to unhealthy lifestyle practices, environmental pollution, and extensive use of chemical-based products. Although eczema is a non-infectious inflammatory skin disorder, it significantly affects patients' physical comfort as well as their psychological and social well-being. Despite the availability of multiple modern therapeutic options, achieving long-term remission remains difficult, with many patients experiencing adverse effects and frequent relapses.

In Ayurveda, eczema closely corresponds to Vicharchika, which arises from tridoshic imbalance—predominantly Kapha—due to improper diet, lifestyle, and exposure to toxins. Ayurvedic management emphasizes holistic principles such as Shodhana, Shamana, and Nidana Parivarjana to address both root causes and symptoms of the disease .

Classical formulations like Shweta Karveeradi Taila and Shweta Karveeradi Lepa are traditionally used in the management of Vicharchika and possess antimicrobial, anti-inflammatory, and wound-healing properties. However, there is a lack of direct clinical evidence comparing the efficacy of these two formulations in Garvishjanya Vicharchika (eczema). Hence, a comparative clinical evaluation is essential to determine their relative effectiveness and to guide rational therapeutic selection in Ayurvedic management of chronic eczema .

Aim

To study comparative clinical study on efficacy of Shwet Karaveeradi Tail and Lep in the management of Garvishjanya Vichrchika w.s.r to eczema

Materials and Methods

Study Design

Randomized comparative clinical study.

Sample Size

70 patients (35 in each group).

Grouping

Group A: Shwet Karveeradi Tail (External application)

Group B: Shwet Karveeradi Lepa (External application)

Sampling Technique

This is a hospital-based study, where a consecutive sample of study subjects (Garvishjanya Vicharchika) were selected by computer-generated random sampling method.

Duration : 18 Months

Method of preparation:

Shwet Karveeradi Tai

Charak Samhita Chikitsa Sthana 7/158, indicated in Kushtha Chikitsa (management of skin disorders)

Ingredients:

Composition of shwet karveeradi tail

Sr. No.	Dravya (Ingredient)	Botanical / English Name	Part Used	Proportion
1	Shwet Karveer	Nerium indicum	Root	1 part
2	Chitrak	Plumbago zeylanica	Root	½ part
3	Vidang	Embelia ribes	Beej (fruit)	½ part
4	Gomutra	Cow urine	–	8 parts
5	Til Tail	Sesamum indicum	Oil	4 parts

Shwet Karveeradi lep

is mentioned in Vangsen Samhita, Chikitsa Sthana, Chapter 25 Showing compostion of shwet karveeradi lepa

Sr. No.	Dravya (Ingredient)	Botanical Name / English Name	Part Used	Proportion
1	Shwet Karveer	Nerium indicum	Root	1 part
2	Kutaj	Wrightia antidysenterica	Fruit	1 part
3	Karanj	Millettia pinnata	Fruit	1 part
4	Daruharidra	Berberis aristata	Bark (Twak)	1 part
5	Malti	Jasminum grandiflorum	Leaf	1 part

Method of Preparation

Step 1: Preparation of Shwet Karveer Kwath

1. Take 1 part of Shwet Karveer Moola Twak (root bark) coarse powder (Yavakuta hurna).
2. Add 16 parts of water and heat the mixture.

3. Continue boiling until the liquid is reduced to one-fourth (¼) of its original volume.
4. Filter the decoction through a clean cotton cloth to obtain Karveer Kwath.

Step 2: Preparation of Sneha Dravya (Medicated Oil)

1. Prepare a paste (Kalka) using Vidang Beej (½ part) and Chitrak Moola (½ part) by adding sufficient water.
2. To this Kalka, add 4 parts of Til Taila, 8 parts of prepared Shwet Karveer Kwath, and 8 parts of Gomutra.
3. Heat this mixture on mild flame while stirring continuously till Snehasiddhi Lakshana (signs of completion of oil processing) appear:
   - Absence of froth,
   - The formation of Varti (wick test) without sticking,
   - Pleasant odor of the mixture.
4. The prepared Shwet Karveeradi Tail is then filtered through a clean cloth and stored in airtight glass bottles.

Method of Preparation of Shwet karveeradi lepa-

The preparation of Shwet Karveeradi Lepa involves using dried ingredients such as Shwet Karveer Moola, Kutaj Phala, Karanj Phala, Daruharidra Twak, and Malti Patra. These ingredients are coarsely powdered and then thoroughly ground to attain a fine powder of Vastragal consistency. The prepared fine powder is stored in a clean, dry, and airtight container to retain its potency and therapeutic efficacy. For application, the stored powder is mixed with a suitable liquid medium (Drava Dravya) such as water, cow's urine, or a medicated decoction, depending on the nature and severity of the condition, to form a homogeneous paste before external application.

Sampling Method

Inclusion Criteria

1. Age between 18- 70 years of age.
2. Either sex irrespective of socioeconomic status and religion.
3. Patient with history of Viruddha Ahar Sevan.
4. Patients with symptoms of Vicharchika.

Exclusion Criteria

1. Pregnant and lactating mother.
2. Infective origins such as Koch's, scabies, Hansen's disease, other fungal infections, herpes zoster, psoriasis, drug induced eczema.
3. Systemic disorders diabetes mellitus, malignancy etc.

Withdrawal Criteria

1. Patients who are not giving proper follow-up.
2. Patients who are not taking medicines properly.
3. Patients who are not willing to complete further treatment.

Parameters of Assessment

Scoring criteria for subjective parameters:

Sr. No.	Clinical Feature	Grading
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 Weeping from the skin lesion followed by crusting
4.	Rukshata	0 - No dryness 1 - Dryness with rough skin (Ruksha) 2 - Dryness with scaling (Khara) - 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 All the lesions full of eruption
6.	Vaivarnyata	0 - Nearly normal skin colour 1 - Brownish red discoloration 2 - Blackish red discoloration - Blackish discoloration

Objective criteria

SCORAD International scoring system.

Sr. No.	Degree	Score
1	Mild	<25
2	Moderate	25-50
3	Severe	>50

Methodology Treatment Details-

Total 70 patients were selected for the study which were divided into two groups.

Group-A: Shwet karveerdi tail, twice-a-day, for external application on the lesions for 30 days.

Group-B: Shwet karveeradi lep twice-a-day, for external application on the lesions for 30 days.

Follow up were taken on Day 15th & 31.

Showing methodology of study in short:

	Group A	Group B
No. of Patients	35	35
Drug	Shwet Karveeradi Tail	Shwet Karveeradi Lep
Dose	As per size of lesion	As per size of lesion
Route of Administration	External Application	External Application
Duration	30 days	30 days
Follow Up	0^{th}, 15^{th}, 31^{st} days	0^{th}, 15^{th}, 31^{st} days

Overall Assessment-

After the end of the study, by using subjective and objective parameters, an assessment was done. The significance of improvement was classified as follows-

Showing overall improvement

Poor Improvement	0-25% Relief in sign and symptoms
Mild Improvement	26-50% Relief in sign and symptoms
Moderate Improvement	51-75% Relief in sign and symptoms
Marked Improvement	76-100% Relief in sign and symptoms

Observation & Result

1. Age-wise Distribution

Shows the age-wise distribution of patients in both groups.

Age	**Group A**		**Group B**	
	No. of patient	**Percentage**	**No. of patient**	**Percentage**
18-30	6	17.14	8	22.86
31-50	18	51.43	18	51.43
51-70	11	31.43	9	25.71
Total	**35**	**100**	**35**	**100**

2. Gender-wise Distribution

Shows gender-wise distribution.

Gender	**Group A**		**Group B**	
	No. of patient	**Percentage**	**No. of patient**	**Percentage**
Male	17	48.57	17	48.57

Female	18	51.43	18	51.43
Total	**35**	**100**	**35**	**100**

3. Occupation-wise Distribution

depicts occupation-wise distribution.

Occupation	No. of patient	Percentage	No. of patient	Percentage
Housewife	11	31.43	11	31.43
Teacher	3	8.57	3	8.57
Business	2	5.71	3	8.57
Student	3	8.57	3	8.57
Job	16	45.71	10	28.57
Lab Assistant	0	0.00	1	2.86
Retired	0	0.00	2	5.71
Engineer	0	0.00	2	5.71
Total	**35**	**100**	**35**	**100**

4. Marital Status-wise Distribution

shows marital status distribution.

Marital status	Group A		Group B	
	No. of patient	Percentage	No. of patient	Percentage
Married	28	80.00	27	77.14
Unmarried	7	20.00	8	22.86
Total	**35**	**100**	**35**	**100**

5. Nidra-wise Distribution

shows distribution according to Nidra.

Nidra	Group A		Group B	
	No. of patient	Percentage	No. of patient	Percentage
Alpa	15	42.86	13	37.14
Madhyam	16	45.71	17	48.57
Pravar	4	11.43	5	14.29

Total	**35**	**100**	**35**	**100**

6. Prakruti-wise Distribution

shows Prakruti-wise distribution.

Prakruti	**Group A**		**Group B**	
	No. of patient	**Percentage**	**No. of patient**	**Percentage**
PK	13	37.14	12	34.29
VP	8	22.86	10	28.57
VK	14	40.00	13	37.14
Total	**35**	**100**	**35**	**100**

Statistical Analysis

1. Kandu

Wilcoxon signed-rank test showed highly significant improvement ($p < 0.0001$) in both Group A and Group B after treatment.

Mann–Whitney U test revealed a statistically significant difference between the two groups ($p = 0.0384$), indicating that Shweta Karveeradi Tail was more effective than Shweta Karveeradi Lep in reducing Kandu.

2. Daha

Within-group analysis using Wilcoxon signed-rank test showed highly significant improvement in both groups ($p < 0.0001$).

Between-group comparison using Mann–Whitney U test showed a significant difference ($p = 0.04515$), suggesting that Shweta Karveeradi Tail was more effective than Lep in Daha.

3. Strava

Wilcoxon signed-rank test showed highly significant improvement in both groups ($p < 0.0001$).

However, Mann–Whitney U test revealed no statistically significant difference between Group A and Group B ($p = 0.4186$), indicating comparable efficacy of both interventions in Strava.

4. Rukshata

Both groups showed highly significant improvement on Wilcoxon signed-rank test ($p < 0.0001$).

Mann–Whitney U test showed a highly significant difference between the groups ($p < 0.0001$), demonstrating that Shweta Karveeradi Tail was more effective than Lep in Rukshata.

5. Pidika

Within-group analysis showed highly significant improvement in both groups ($p < 0.0001$).

Between-group comparison showed a significant difference ($p = 0.000271$), indicating superior efficacy of Shweta Karveeradi Tail over Lep in Pidika.

6. Vaivarnyata

Wilcoxon signed-rank test showed highly significant improvement in both groups ($p < 0.0001$).

Mann–Whitney U test showed a significant difference between the groups ($p = 0.000425$), indicating better improvement with Shweta Karveeradi Tail.

SCORAD Score Analysis

Paired t-test (Within Groups)

Both Group A and Group B showed highly significant reduction in SCORAD scores after treatment ($p < 0.0001$).

Unpaired t-test (Between Groups)

No statistically significant difference was observed between Group A and Group B ($p = 0.4268$), indicating comparable efficacy of both treatments in reducing SCORAD score.

Overall Result

Both Shweta Karveeradi Tail and Shweta Karveeradi Lep showed statistically significant improvement in the management of Garvishajanya Vicharchika (Eczema).

Although Shweta Karveeradi Tail showed better results in individual parameters like Kandu, Daha, Rukshata, Pidika, and Vaivarnyata, overall SCORAD improvement was comparable in both groups.

Hence, the Null Hypothesis is rejected.

Discussion

Garvishjanya Vicharchika (eczema) is a chronic inflammatory skin disorder involving Tridosha vitiation with Kapha predominance. The present study evaluated the clinical efficacy of Shwet Karaveeradi Tail (Group A) and Shwet Karaveeradi Lepa (Group B) in managing its signs and symptoms, along with demographic and constitutional factors influencing disease prevalence.

Age Distribution

The majority of patients in both groups belonged to the 31–50 years age group (51.43%), indicating a higher prevalence of Vicharchika in middle-aged individuals. According to Ayurveda, this period corresponds to Madhyama Avastha, which is dominated by Pitta Dosha. Pitta has an Ashraya–Ashrayi Sambandha with Rakta, and its vitiation, along with Kapha, manifests as symptoms such as Kandu, Daha, Pidika, and Srava. This explains the increased susceptibility of this age group to Vicharchika. From a modern perspective, individuals in this age range experience significant physical, occupational, psychological, and social stress, along with irregular dietary habits, exposure to allergens, fast food consumption, and environmental pollution, all of which are known triggers for eczema.Lower incidence was observed in the 18–30 years age group (Group A: 17.14%, Group B: 22.86%), possibly due to stronger immunity, better tissue regeneration, and Kapha dominance during early adulthood.

Gender Distribution

The study showed an almost equal distribution between males and females in both groups (48.57% males and 51.43% females). This suggests that Garvishjanya Vicharchika affects both sexes nearly equally. The slight female predominance observed was statistically insignificant, indicating no strong gender-specific predisposition for the disease.

Occupational Status

In Group A, jobholders (45.71%) and housewives (31.43%) formed the majority, while Group B showed a predominance of housewives (31.43%) followed by jobholders (28.57%). The presence of diverse professions such as teachers, students, engineers, lab assistants, and retired individuals indicates that eczema is not limited to a specific occupation.A higher prevalence among jobholders and housewives suggests the influence of work-related stress, domestic responsibilities, sedentary lifestyle, exposure to

detergents, chemicals, and emotional stress, all of which can aggravate Dosha imbalance and contribute to disease manifestation.

Marital Status

Most patients were married (Group A: 80%, Group B: 77.14%). Married individuals often experience increased responsibilities related to family, occupation, and social obligations, leading to stress, irregular diet, and disturbed lifestyle patterns. Additionally, the affected age group commonly corresponds to the married population in Indian society, which may explain this observation.

Nidra (Sleep Pattern)

Most patients reported Madhyama Nidra (Group A: 45.71%, Group B: 48.57%) followed by Alpa Nidra. Symptoms such as intense itching and burning sensation are known to disturb sleep. Inadequate or disturbed sleep further aggravates Tridosha imbalance, especially Pitta and Vata, thereby worsening the disease and creating a vicious cycle.

Prakruti

The majority of patients belonged to Vata-Kaphaja Prakruti, followed by Pitta-Kaphaja and Vata-Pittaja types. This distribution highlights the dominance of Vata and Kapha in the pathogenesis of Vicharchika. Kapha contributes to Kandu and Srava. Vata causes Rukshata, fissuring, roughness, and discoloration. Pitta is responsible for Daha and erythema. Although Kapha dominance was evident, the involvement of all three Doshas supports the classical Ayurvedic description of Vicharchika as a Tridoshaja disorder.

Effect on Clinical Parameters

Kandu (Itching)

Both groups showed a highly significant reduction in itching ($p < 0.0001$). However, Group A (Tail) demonstrated superior results compared to Group B ($p = 0.0384$). The Sneha, Snigdha, and Sukshma properties of Tail facilitate deeper penetration, reduce dryness, and pacify aggravated Kapha and Pitta more effectively.

Daha (Burning Sensation)

Burning sensation, caused by Pitta and Rakta vitiation, was significantly reduced in both groups ($p < 0.0001$). Group A showed better relief ($p = 0.04515$), likely due to the nourishing and soothing effect of oil-based application.

Srava (Oozing)

Both therapies were highly effective in reducing oozing ($p < 0.0001$), with no statistically significant difference between groups ($p = 0.4186$). This indicates that both Tail and Lepa possess adequate Kapha-pacifying and drying properties to control discharge.

Rukshata (Dryness)

Dryness, attributed to Vata aggravation, showed significant improvement in both groups ($p < 0.0001$). Group A performed significantly better ($p < 0.0001$), confirming the superiority of Tail in restoring skin moisture and improving barrier function through its Snigdha Guna.

Pidika (Eruptions)

Both groups showed marked improvement in eruptions ($p < 0.0001$). However, Group B (Lepa) was significantly more effective ($p = 0.000271$), due to its stronger Shoshana and Shodhana actions, which help dry lesions and accelerate healing.

Vaivarnyata (Discoloration)

Pigmentation changes improved significantly in both groups ($p < 0.0001$). Group A showed superior

results (p = 0.000425), possibly due to better tissue nourishment, deeper penetration, and enhanced regeneration promoted by Tail.

SCORAD Score Analysis

The SCORAD index, which evaluates disease severity by assessing lesion extent, intensity, itching, and sleep disturbance, showed significant improvement in both groups.

Within-Group Comparison

Group A: Reduced from 43.51 to 24.31 ($p < 0.0001$)

Group B: Reduced from 45.02 to 26.20 ($p < 0.0001$)

Between-Group Comparison

There was no statistically significant difference between the two groups ($p = 0.4268$), indicating that both therapies were equally effective in reducing overall disease severity, despite differences in individual symptom responses.

Mode of Action

Shwet Karaveeradi Tail

The formulation exhibits Dosha Shamana through its Tikta–Katu Rasa and Ushna Veerya, effectively pacifying Kapha and Pitta. Ingredients like Karveer, Chitrak, and Vidang possess Kusthaghna and Kandughna properties, while Vidang and Gomutra act as Raktashodhaka. The base oil (Til Tail) provides Sneha Karma, enhancing skin nourishment, circulation, and healing. Pharmacological actions such as anti-inflammatory, antimicrobial, antifungal, antioxidant, and wound-healing effects support its efficacy in eczema.

Shwet Karaveeradi Lepa

Lepa contains Tikta and Kashaya Rasa, Ushna Veerya, and Ruksha–Laghu Guna, making it effective in reducing Kapha-Pitta vitiation, drying lesions, and controlling discharge. Its Shodhana action detoxifies local tissues, while antimicrobial and anti-inflammatory properties help reduce infection, inflammation, and promote tissue repair.

Therapeutic Significance

In Garvishjanya Vicharchika, Kapha and Pitta vitiation along with toxin accumulation (Visha) leads to itching, oozing, and chronic skin changes. Shwet Karaveeradi Tail and Lepa provide localized Dosha Shamana, effective symptom relief, and tissue healing with minimal systemic adverse effects. Their complementary actions validate the Ayurvedic principle of individualized and stage-specific local treatment in the management of eczema.

Conclusion

The present comparative clinical study demonstrates that both Shwet Karaveeradi Tail and Shwet Karaveeradi Lep are effective topical interventions in the management of Garvishjanya Vicharchika (eczema). Both treatments produced statistically significant clinical improvement, as evidenced by a marked reduction in SCORAD scores, with no significant difference between the two groups ($p = 0.4268$), indicating comparable overall efficacy.

Symptom-wise analysis revealed differential therapeutic advantages. Shwet Karaveeradi Tail showed superior efficacy in reducing Rukshata (dryness) and Vaivarnyata (pigmentation changes), which may be attributed to its Snigdha and Sukshma properties facilitating deeper penetration and sustained tissue

nourishment. In contrast, Shwet Karaveeradi Lep demonstrated faster resolution of Pidika (vesicular eruptions), likely due to its Shoshana and Shodhana actions on local pathological processes.

Both formulations effectively alleviated Kandu (itching), Daha (burning sensation), and Strava (discharge) by pacifying aggravated Kapha and Pitta doshas and restoring Twak homeostasis. Demographic analysis indicated a higher prevalence of the condition among middle-aged individuals (31–50 years), with nearly equal gender distribution and predominance of Vata-Kaphaja Prakruti, suggesting the contributory role of lifestyle, occupational factors, and psychosomatic influences.

Overall, the study supports the complementary therapeutic roles of Shwet Karaveeradi Tail and Lep in eczema management. Tail appears more suitable for chronic presentations with dryness and pigmentation, whereas Lep is preferable for acute lesions characterized by vesiculation. These findings reinforce the Ayurvedic principle of individualized topical therapy based on Prakruti, lesion morphology, and disease chronicity, thereby validating their clinical relevance in the management of eczema.

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