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Research Article

Detergent dermatitis

A Comparative Clinical Trial on Harenvadi Churna Lepa versus Yashtimadhu Churna Lepa with Vilvadi Agada as common internal medicine in Kshalana Visha with special reference to Detergent dermatitis

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Introduction: Detergents are used in almost every household in developed and developing countries. The resulting dermatitis occurs mainly on the hands, is caused by irritation from cleaning agents, and is highly stressful and debilitating. The main objective of the study was to evaluate the comparative effect of Harenvadi Churna Lepa with Yashtimadhu Churna Lepa in reducing Four cardinal features of Kshalana Visha, viz. Erythema, Dryness, Pruritus and Burning sensation. Harenvadi Churna Lepa mentioned in Ashtanga Samgraha Visha Pratishedha Adhyāya, contains 4 drugs, each having Vishahara property and specially indicated in Garopahatha Tvacha.

Methods: The study was a comparative clinical trial involving 86 participants diagnosed with detergent dermatitis, randomly allocated in to trial and control groups. Trial group recieved Harenvadi Churna and the control group received Yashtimadhu Churna. Both groups received Vilwadi Agada as the common internal medicine. Assessment were done before treatment, 8th, 15th and 22nd day (follow-up).

Result: Result concluded that trial drug was more efficacious than control drug in managing 4 cardinal symptoms of Kshalana Visha ($p<0.001$).

Discussion: There is significantly superior difference in the efficacy of Harenvadi Churna Lepa when compared to Yashtimadhu Churna as Lepa in the management of Kshalana Visha w.s.r. to Detergent dermatitis

Keywords: Kshalana Visha, Detergent dermatitis, Harenvadi Churna, Yashtimadhu Churna, Lepa, Agada Tantra

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Introduction

Hand dermatitis is a significant public health issue due to its widespread occurrence, impact on quality of life, and the associated loss of work time from sick leave. Its one-year prevalence is estimated at around 10% in the general population, with rates rising up to 30% in high-risk professions such as hairdressers, cleaners, and healthcare workers.**[1]**

Detergents, which are used in virtually every household worldwide, often lead to dermatitis primarily affecting the hands. This condition is particularly distressing and disabling, as regular exposure to even low concentrations of dishwashing detergents can cause skin lesions in many individuals.

Rather than proceeding directly from a morphological diagnosis to treatment, it is crucial to incorporate preventive measures into the treatment strategy based on the underlying causes.**[2]**

Agada Tantra, one among the eight branches of Ayurveda, deals with different kinds of poisons and their treatment. A poison is a substance which, when introduced into an organism or in contact with any part of it, causes illness or death due to its constitutive properties. According to *Agada Tantra*, poison or *Visha* is classified into *Kritrima Visha* and *Akritrima Visha*, out of which *Kritrima Visha* is otherwise called *Garavisa*.**[3]**

It's of two types, *Savisha Dravya Samyogajanya* and *Nirvisadravya Samyogajanya*.**[4]**

Susrutacarya5 describes *Gara* as *Vividhavisa Samyogakrit*. *Gara* is a combination of different substances which does not prove fatal according to *Charakacharya*.**[4]**

Chakrapani describes *Gara* as a combination of *Savishadravyas* and *Nirvisha Dravyas* which produces *Chirakari Rogas*. *Vagbhata* describes *Gara* as *Kritrima Visha* made from different substances. **[6]**

According to commentator Indu, *Gara* is a special type of *Visha* which is given along with other food and includes *Sakalamapi Vastujam.* According to *Dalhana's* commentary, poisons are not always used intentionally and may be used accidentally. *Madhava Nidana* commentary, *Madhukosa* explains that *Garavisha* contains properties like *Apaki.***[7]**

In *Kasyapa Samhita* the combination which produces effect *Garavisha* and 15 divided *Savisa Dravya Samyoga Kritam* (combination of poisonous materials which can be termed as *Kritrima Visha*) and *Nirvishadravya Samyogakritam* (combination of two non-poisonous substances).**[8]**

In traditional Malayalam textbooks like *Kriya Koumudi* and *Prayogasamucchaya*, *Garavisha* is explained as *Kaivisha* which has *Vaseekarana* property. This new *Visha* condition is found to have *Vāta Pitha* predominance. *Yashtimadhu,* renowned for its *Vishahara, Kandughna, Varnya*, and *Vata-Pitta Samaka* properties, is currently used in the form of *Lepa* for managing *Kshalana Visha*. Additionally, *Harenvadi Churna Lepa*, as described in *Aṣhtanga Samgraha Visha Prathisheda Adhyaya*, comprises four drugs, each possessing *Vishahara* properties and specifically indicated in *Garopahatha Tvacha*.

This comparative clinical trial seeks to determine which formulation between *Yashti Madhu Churna Lepa* and *Harenvadi Churna Lepa* offers superior efficacy in treating *Kshalana Visha* with special reference to Detergent dermatitis. By systematically evaluating these Ayurvedic formulations, aim of the study was to contribute valuable insights into the management of *Kshalana Visha*, potentially paving the way for more targeted and effective treatments that could alleviate suffering and enhance the quality of life for affected individuals.

Aim and Objective

Aim

To provide an effective formulation in contact poisoning from the context of *Agada Tantra*.

Objective

To assess the efficacy of *Harenvadi Churna Lepa* in comparison with *Yashtimadhu Churna Lepa* with *Vilvadi Agada* as common internal medicine in the management of *Kshalana Visha.*

Materials and Methods

Study design

The study was a comparative clinical trial on 86 participants diagnosed with *Kshalana Visha* (detergent dermatitis).

Source of data

Primary data was collected from 86 participants who satisfied the inclusion criteria, attending the OPD of VPSV Ayurveda College Hospital, Kottakkal.

Study setting

Agada Tantra outpatient department of VPSV Ayurveda College Hospital, Kottakkal, Kerala

Study period

The study was completed during a period of 9 months (July 2023 to march 2024)

Sampling

86 participants who fulfilled inclusion criteria for detergent dermatitis were selected for trial from patients attended Agada Tantra OPD during study period. The participants were allocated in to two groups by random number table method. Trial group received *Harenvadi Churna* and control group received *Yashtimadhu Churna*. Both groups received *Vilwadi Agada* as common internal medicine.

Inclusion criteria

1. Age: 18-60 years with no gender discrimination.
2. Those with *Raga, Raukshya, Kandu* and *Daha* in hands.
3. Chronicity less than one year.
4. Participants who are undergoing treatment for the same condition will also be included only after 15 days of wash out period.
5. Those who have given informed consent.

Exclusion criteria

Participants with history of Palmar psoriasis.

1. Patients with known serious systemic disorders.
2. Lactating and pregnant women.

Method of collection of Data

Participants who satisfied the inclusion criteria were selected. Clinical data was collected on before treatment (0th day), 8, 15 & 22 day (follow-up).

Study tool

A self-designed case record form was used for the assessment of clinical signs and symptoms of the disease. The symptoms were graded according to the severity on before treatment (0th day), 8th, 15th and 22nd day (follow-up).

Grading of the symptoms

***1. Raga* (Erythema)**

Table 1: Grading of signs and symptoms of *Raga* (Erythema) - Draize dermal irritation scoring system[9]

Scoring	Erythema reaction
0	No erythema
1	Very slight erythema
2	Well defined erythema
3	Moderate to severe erythema
4	Severe erythema

***2. Raukshya* (Dryness)**

Table 2: Grading of signs and symptoms of *Raukshya* (Dryness)

Scoring	Dryness scoring scale[10]
0	No dryness
1	Slight dryness
2	Moderate scaling
3	Marked scaling /Slight fissuring
4	Severe scaling/Fissuring

3. Kandu (Pruritus) - Visual analogue scale**[11]**
4. Daha (Burning sensation) - Visual analogue scale**[11]**

Source and authentication of drugs

The trial and control drugs were prepared at Arya Vaidya sala factory, Kottakkal, and were authenticated by experts at Vaidyaratnam P S Varier Ayurveda College, Kottakkal. The drug that was administered was also collected from Atya Vaidya Sala, Kottakkal.

Ingredients of trial and control drugs

Table 3: Ingredients of *Harenvadi Yoga*

SN	Sanskrit name[12]	Binomial nomenclature	Family	Vernacular name	Useful part	Proportion
1.	Harenu	Vitex negundo Linn.	Verbanaceae	Arenukam	Seed	1 part
2.	Candanam	Pterocarpus santalinus Linn.	Leguminosae	Raktha Chandana	Heart wood	1 part
3.	Syama	Ichnocarpus frutescens R. Br	Apocynaceae	Parvalli	Root	1 part
4.	Nalada	Vetiveria zizanioides Linn.	Gramineae	Ramacham	Root	1 part

Control drug

***Yashti Madhu Churna*[12]**

Latin name: *Glycyrrhiza glabra* Linn.
English name: Indian Liquorice

Family: Fabaceae
Vernacular name: Irattimadhuram
Useful part: Root

Table 4: Intervention

Particulars	Trial	Control
Drug	Harenvadi Churna Lepa	Yashtimadhu Churna Lepa
Sample size	43	43
Dispensing form	Powder	Powder
Mode of use	Lepa	Lepa
Medium of application	Water	Water
Duration and dosage	2 weeks	2 weeks

Table 5: Details of intervention

Particulars	Trial	Control
Drug	Vilvadi Agada	Vilvadi Agada
Dosage form	700 mg, Tablet in plain water	700 mg, Tablet in plain water
Dosage	Twice daily, Before food	Twice daily, before food
Duration	2 weeks	2 weeks

Assessments were done on the symptoms *Raga* (Erythema) and *Raukshya* (Dryness), using an ordinal scale; for symptoms *Kandu* (Itching) and *Daha* (Burning sensation) Visual Analogue Scale (VAS) was used. All symptoms were assessed on the 0th, 8th, 15th day of treatment; also on 22nd day (follow-up). It was recorded in the concerned CRF and evaluated statistically to draw a conclusion.

Statistical tests used

The severity of symptoms was graded, and assessments were conducted at multiple time points: before treatment (BT), on the 8th day (D8) of intervention, on the 15th day (D15) of intervention, and on the 22nd day (D22) for follow-up evaluation. For ordinal scales, Non-parametric statistical tests were chosen for ordinal data and for continuous variables those violated normality assumption. Within-group comparisons were performed using Friedman's test, and pairwise comparisons were conducted with the Wilcoxon signed rank test. Between-group comparisons were done using the Mann-Whitney U test. Statistical analysis was conducted using IBM SPSS Statistics 20 software.

Ethical considerations

The study synopsis along with case record form and consent form was placed before Institutional Ethics committee of VPSV Ayurveda college, Kottakkal after various levels of scrutiny and subsequent modification based on their recommendations. Final acceptance was gained and ethical clearance was obtained for the study. Trial was registered in the Clinical Trial Registry of India. The reference number is CTRI/2023/04/051610.

Observations and Results

Out of 86 participants 56% were in the age group of 18 - 30 years. It indicates the Domestic Responsibilities of young women such as dishwashing, laundry, and general cleaning. This can include frequent contact with domestic detergents and cleaning solutions. Especially social and cultural situation of the selected area promotes early marriage too. 99 % were females and 1% were males. This gender distribution may reflect traditional gender roles emphasized in Kerala's culture, where women are primarily responsible for household chores like cooking, cleaning, and laundry. A study conducted by Klein G *et al*. showed differences in skin texture between males and females,**[13]** including variations in thickness, sebum production, hormonal influences, and skincare practices, can influence their susceptibility to detergent dermatitis. Religion wise, 77% were belonged to Muslim community, 23% were Hindus. This distribution reflects the demographic composition of the area. Out of the total 86 participants, the majority were housewives (57%), followed by students (31%), individuals working in the private sector (9%), and cleaning staff (2%). In a study conducted by Agarwal *et al.* "Detergent dermatitis" and "Housewife dermatitis"**[14]** are often used interchangeably, highlighting the prevalence of this condition among housewives due to their frequent exposure to cleaning agents and detergents during household chores. The majority (76%) came from middle-class families, while 14% were from poor families. The remaining 10% belonged to the rich class. Married individuals constituted 70%, while 30% were unmarried. Marriage responsibilities of women in Kerala, which include frequent washing of clothes and vessels for all family members, may correlate with higher incidence of detergent dermatitis due to increased exposure to detergents. Out of 86 participants, A majority of participants (77%) have frequent contact with detergents, exceeding three times per day, indicating high usage or exposure. A notable but smaller proportion (15%) have contact three times per day. Fewer participants report lower frequencies, 3% twice per day & 5% once per day.

The high frequency of detergent exposure among majority of participants suggests a potential correlation with increased incidence of detergent dermatitis. This finding supports study conducted by klein G *et al.* The distribution of detergent exposure among participants shows significant daily contact, from brief to several hours. This varying exposure increases risk of detergent dermatitis, especially for those with higher exposure, as supported by Klein G *et al.* Understanding these patterns is key for developing targeted prevention and skin care strategies. 100% of participants showed *Vata - Pitta* predominance. Half of participants (50%) reported that their symptoms worsen during winter season, while 43% indicated that their symptoms do not vary with any particular season. It seems winter season is having an impact on exacerbation of symptom**[15]** especially dryness, supporting Petersen *et al.* On assessing *Prakruti*, 53% were of *Vāta-Pitta Prakṛti*, 27% were of *Kapha Pitta Prakṛti* and 20% were *Vāta-Kapha Prakṛti.* It suggests that individuals with *Vāta-Pitta Prakṛti* are more susceptible to developing conditions where *Vāta* and *Pitta* are predominant. These findings support study conducted by Suwarna, Umarkar *et al.,* i.e., Skin of*Vata*and*Pitta Prakriti* individuals had less hydration, while hydration was maintained in *Kapha-Prakriti* individual than*Vata*and*PittaPrakriti*person.**[16]**

Properties of the drugs

The properties of the trial and control drug are summarized in Table no. 6

Particulars	Trial	Control
Attributes	Harenvadi Churna	Yashtimadhu Churna
Rasa (Taste)	Thiktha Madhura	Madhura, Thiktha
Guna (Properties)	Laghu, Ruksha	Guru, Snigdha
Veerya (Potency)	Seetha	Seetha
Vipaka (Metabolic effect)	Katu	Madhura
Dosha Samanatwa (Function on Dosha)	Tridosha Samana	Tridosha Hara

Results of intervention

The results are summarized in tables

Table 7: Comparison in the reduction of *Raga* (Erythema) between BT and D22 in the trial and control groups using Mann-Whitney U test

Groups	N	Mean Rank	Sum of Ranks	Mann- Whitney U	Z	p-value
Trial	43	53.71	2309.5	485.5	-3.999	0.001
Control	43	33.29	1431.5			
Total	86					

The analysis of the symptom of *Raga* (Erythema) from BT to D22 revealed a mean rank of 53.71 in the trial group and 33.29 in the control group which were tested using Mann-Whitney U test with a score of 485.00, which was statistically significant $p<0.001$.

Table 8: Comparison in the reduction of *Raukshya* (Dryness) between BT and D22 in the trial and control groups using Mann-Whitney U test

Groups	N	Mean Rank	Sum of Ranks	Mann- Whitney U	Z	p-value
Trial	43	49.07	2110	685	-2.242	0.025
Control	43	37.93	1631			
Total	86					

The analysis of the symptom of *Raukshya* (Dryness) from BT to D22 revealed a mean rank of 49.07 in the trial group and 37.93 in the control group which were tested using Mann-Whitney U test with a score of 685.00, which was statistically significant $p<0.05$

Table 9: Comparison in the reduction of *Kandu* (Pruritus) between BT and D22 in the trial and control groups using Mann-Whitney U test.

Groups	N	Mean Rank	Sum of Ranks	Mann- Whitney U	Z	p-value
Trial	43	50.22	2159.50	635.50	-2.511	0.012
Control	43	36.78	1581.50			
Total	86					

The analysis of the symptom *Kandu* (Pruritus) from BT to D22 revealed a mean rank of 50.22 in the trial group and 36.78 in the control group which were tested using Mann-Whitney U test with a score of 635.50, which was statistically significant $p<0.05$

Table 10: Comparison in the reduction of *Daha* (Burning sensation) between BT and D22 in the trial and control groups using Mann-Whitney U test

Groups	N	Mean Rank	Sum of Ranks	Mann- Whitney U	Z	p-value
Trial	43	53.41	2296.50	498.500	-3.763	0.001
Control	43	33.59	1444.50			
Total	86					

The analysis of the symptom *Daha* (Burning sensation) from BT to D22 revealed a mean rank of 53.41 in the trial group and 33.59 in the control group which were tested using Mann-Whitney U test with a score of 498.50, which was statistically significant $p<0.001$.

Table 11: Percentage relief of Trial and control drugs during study period

Symptoms	BT-D15		D15-D22		BT-D22	
	Trial	Control	Trial	Control	Trial	Control
Raga	50%	30%	76.3%	56%	45.2%	36.5%
Roukshya	51.8%	33%	63.4%	52.9%	24%	12.5%
Kandu	82.9%	59.8%	93.7%	74.9%	63.3%	37.6%
Daha	86%	57.9%	93.7%	76.6%	54.9%	44.4%

Discussion

Hand dermatitis, often caused by detergent exposure, is a significant public health concern affecting up to 30% of workers in certain occupations, such as hairdressers, cleaners, and healthcare workers. This condition, known as irritant contact dermatitis, results from prolonged contact with harsh chemicals in detergents. The concept of *Garavisha* in Ayurveda, which describes substances causing toxicity, aligns with modern irritants like detergents. Although ancient texts did not specifically mention detergent dermatitis, it relates to the term *Kshalana Visha*, which refers to skin toxicity from prolonged exposure to cleansing agents.

Symptoms of detergent dermatitis include redness, dryness, itching, burning, warmth, skin fissures, rough texture, and changes in nail color, often affecting the hands and occasionally the feet. Risk factors for this condition include sensitive skin, frequent detergent exposure, and use of low-quality detergents. This exposure disrupts the skin's barrier, leading to inflammation and dermatitis.

Detergent dermatitis imposes societal costs, including healthcare expenses, reduced productivity, and a lower quality of life. Ayurvedic treatment focuses on alleviating symptoms through *Vishahara*, *Kandughna*, *Varnya*, and balancing *Vata-Pitta*. Herbs like *Yashtimadhu* and formulations like *Harenvadi Churna Lepa* are being tested for their effectiveness in treating the condition.

In conclusion, detergent dermatitis is a major health and economic issue, requiring collaborative efforts for prevention, treatment, and research into Ayurvedic remedies to mitigate its impact. The individual ingredients of *Harenvadi Churna Lepa* exhibit various beneficial properties. *Harenu* demonstrates anti-inflammatory and antioxidant effects, with rich content of phenols and flavonoids in its ethanolic extract.

This extract shows significant antioxidant activity through assays like DPPH radical scavenging, ferrous chelation, and total antioxidant capacity. *Raktha Chandana* possesses antioxidant, antimicrobial, and anti-inflammatory activities, reducing pro-inflammatory cytokines such as TNF-alpha and IL-6. *Syama* and *Nalada* also contribute antioxidant and anti-inflammatory actions, with *Nalada* additionally showing antibacterial properties. Clinically, no adverse drug reactions have been observed with *Harenvadi Lepa*.

Analyzing the *Rasādi Pañcaka* properties, *Tiktha Rasa* in the ingredients has *Vishahara, Krimihara, Daha Praśamana* (burning sensation relief), *Kanduhara* (itching relief), *Kushtaghna* (skin disease relief), and *Rakta Prasadana* (blood purification) properties. *Madhura Rasa* also helps with *Dahasamana* (heat reduction), *Twachya* (skin health), and *Vata-Pitta Śamaka* (balancing body energies). The *Laghu Guṇa* promotes quick action, which could explain the fast-acting nature of the *Lepa*. The *Śīta Vīrya* further contributes to cooling effects, helping alleviate symptoms like *Daha* (burning sensation). The combined properties of the ingredients, particularly the anti-inflammatory and cooling actions of *Hareṇu* and *Nalada*, make the *Harenvadi Lepa* effective in treating conditions like *Raga* (reness), *Raukshya* (dryness), *Kandu* (itching), and *Daha* (burning sensation), especially in *Garavisha Janya* conditions, as described in the *Ashtanga Samgraha.*

Yashtimadhu Churna contains various phytochemical constituents such as glycyrrhizin, flavonoids, and saponins, which contribute to its pharmacological properties, including anti-inflammatory, antioxidant, antimicrobial, and immunomodulatory effects. Studies highlight its ability to scavenge DPPH free radicals by 80% and protect fibroblasts from oxidative stress. Its *Rasādi Pañcaka* properties include *Madhura Rasa, Guru Snigdha Guna, Sita Virya, Madhura Vipākā,* and *Vāta-Pitta Hara*, which help alleviate *Pitta* and *Vāta Dosha*. Additionally, its *Viṣahara*, *Dahasamana* (burning sensation relief), *Varṇya* (skin health), *Twachya* (skin rejuvenation), and *Kandughna* (itching relief) properties make it effective in treating symptoms of *Kshalana Visha* (detergent dermatitis), such as *Raga* (redness), *Raukshya* (dryness), *Kandu* (itching), and *Daha* (burning sensation). In a comparative study of *Yashtimadhu Churna* and *Harenvadi Churna*,

Both formulations proved effective in reducing symptoms. However, *Harenvadi Churna* showed a faster onset of action and sustained efficacy during the follow-up period. Given that *Kshalana Visha* is a *Gara Visha Janya* condition, *Harenvadi Churna*, which is specifically indicated for such conditions, demonstrated significantly faster results compared to *Yashtimadhu Churna*. These findings suggest that *Harenvadi Churna* may be the preferred treatment for *Kshalana Visha*, due to its rapid and consistent therapeutic effects.

When *Lepa* is applied to a particular area, it comes into contact with the skin and hair follicles. Both of these are connected to the peripheral circulation (*Tiriyak Ghata Dhamani*) responsible for sweat production (*Swedavahana*). The active ingredients of the drug enter the sweat ducts (*Swedavaha Srotas*) and hair follicles to achieve a certain therapeutic effect. Thus, a topically applied substance may penetrate the hair follicles, but not necessarily through the skin barrier and into the living tissues. When a drug is applied externally, it produces a therapeutic effect at a specific site in the epidermal tissue. Certain drugs act by skin penetration or by percutaneous absorption. Deodorants and emollients are examples. The epidermis has hundreds to thousands of times more surface area than other absorption routes. Transdermal absorption of drugs helps to increase their effectiveness.**[22]** The cells of the stratum corneum are called keratinocytes. These cells are functionally dead, nucleated and filled with keratin. The stratum corneum resembles a brick and mortar wall, with the keratinocytes being the bricks and the lipid bilayers forming the mortar. Lipids form various bilayers that surround the keratinocytes. Intracellular lipids consist of a mixture of ceramides, cholesterol, cholesterol esters and fatty acids. The stratum corneum is composed of 15-20 layers of corneocytes and is 10-15 micrometers thick when dry. It swells when moisturized and thickens after application. There is a short-term, transient diffusion, which may be much greater through the appendages than through the stratum corneum matrix. The rate of absorption depends primarily on the phytochemical parameters of the drug, and secondarily on the drug carrier, pH, concentration, age of the skin, the area to be treated and the thickness of the skin barrier layer, moisture content, etc. are variables that affect percutaneous absorption.

Hydration of the stratum corneum is the most important physicochemical factor in skin penetration. Hydration occurs by water diffusing from the lower layers of the epidermis or by accumulation of sweat after application of an occlusive vehicle or cover to the surface. Under occlusive conditions, water loss from the stratum corneum is compensated and the resulting increase in water concentration in this layer clearly improves drug penetration.

From the data obtained from clinical trial and the statistical analysis, it can be observed that both the trial and control drugs demonstrated statistically significant reductions in all four cardinal features of *Kshalana Visha*. When comparing the two groups, the trial drug showed a statistically significant reduction in reducing *Raga, Kandu* and *Daha* in every stage except the follow-up period. Additionally, the trial drug was more efficacious than the control drug in alleviating *Raukshya* during the first 8 days of intervention and throughout the entire assessment period. Overall, the trial drug provided a significantly higher percentage of symptom relief across all four assessment parameters compared to the control drug. Thus, the trial drug *Harenvadi Churna Lepa* was found more efficacious than *Yashtimadhu Churna Lepa* in managing four cardinal symptoms of *Kshalana Visha*, *Raga, Raukshya, Kandu* and *Daha.*

Conclusion

Hand dermatitis is a major concern due to its high prevalence, impact on work and daily life. Effective management requires not only treating the symptoms but also implementing preventive measures to address the root causes, thereby reducing the condition's overall impact. The main objective of the study was to assess the efficacy of *Harenvadi Churna Lepa* in comparison with *Yashtimadhu Churna Lepa* with *Vilvadi agada* as common internal medicine in the management of *Kshalana Visha*. Aim was to provide an effective formulation in contact poisoning from the context of *Agada Tantra*. The following conclusions were evolved after conceptual compilation, critical review, clinical observations and discussion. In Ayurveda, toxic effects from substances are categorized under *Gara adhiṣṭhānas.* Although ancient texts do not explicitly describe detergent dermatitis, it aligns with the concept of *"Kshalana Visha,"*

A condition resulting from prolonged exposure to cleansing agents. Symptoms include *Raga, Raukshya, Kandu* and *Daha*, *Aushnya, Tvak Sphutana, Khara Sparsa* and *Nakha Vaivarnya*, typically affecting the fingertips, palms, and occasionally the back of the hands, wrist joints, and feet. These symptoms closely resemble those described for *Kshalana Visha.* In the present study, incidence of detergent dermatitis was found to be more prevalent in females of age group 18-30 years and occupationally more among the house wives who are frequently exposed to detergents for 2 to 3 hours daily. Individuals with *Vata-Pitta Prakriti* are more susceptible to developing conditions like *Kshalana Visha* where *Vata* and *Pitta* are predominant. All 86 participants exhibited *Vāta-Pitta* predominance based on their symptoms. Symptoms include *Raga* (Erythema), *Raukshya* (Dryness), *Daha* (Burning sensation), *Aushnya* (Hot skin), *Tvak Sphuṭana* (Fissures), *Khara Sparṣa* (Rough texture), *Kandu* (Itching), etc. Half of the participants (50%) reported that their symptoms worsen during the winter season. It seems winter season is having an impact on exacerbation of the symptom. *Harenvadi Churna Lepa* mentioned in *Ashtanga Samgraha Visha Prathisheda Adhyāya***,** contains 4 drugs, each having *Vishahara* property and specially indicated in *Garopahatha Tvaca*. In the present study, it was found that both the drugs, *Harenvadi Churna Lepa* and *Yashtimadhu Churna Lepa* were efficacious in managing the 4 cardinal symptoms of *Kshalana Visha,* which was statistically highly significant. From the data obtained from clinical trial and the statistical analysis, the trial drug (*Harenvadi Churna Lepa*) showed more efficacy compared to the control drug (*Yashtimadhu Churna Lepa*) in reducing all the four cardinal symptoms of *Kshalana Visha*, in all stages of assessments.

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