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Case Report

A Clinical Case Report on the Management of Unintended Adverse Reaction following *Panchatikta Kashaya Basti* Administration in *Vicharchika* (contact dermatitis)

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Abstract

Introduction: Cutaneous adverse drug reactions (CADRs) are the most common manifestations of drug hypersensitivity. Although Ayurvedic treatments are generally considered natural and safe, they may also result in adverse effects. This report highlights a case of a CADR potentially associated with the use of *Niruha Basti*, a therapeutic enema used in *Panchakarma*. Methods: A 56-year-old female with chronic skin lesions over the dorsum of the bilateral foot and ankle joints visited the Panchakarma OPD. She was treated with *Panchatikta Kashaya Basti* following the *Kala Basti* protocol and *Anuvasana Basti* with *Tiktaka Ghrita*. Results: Following the administration of the first *Niruha Basti*, the patient developed severe pruritus and generalised swelling, suggestive of a cutaneous adverse reaction. The condition was managed with *Sarvanga Parisheka* (full-body decoction pouring), followed by external application of *Tiktaka Ghrita*, and *Yastimadhu Choorna Lepa* mixed with *Ksheera*. The patient experienced significant symptomatic relief after the intervention. Conclusion: This case highlights the potential for adverse cutaneous reactions to Ayurvedic formulations, especially when ingredients with *Tikshna* (sharp) and *Ushna* (hot) properties are used in *Basti*. A detailed patient evaluation is important to help prevent adverse effects, particularly in susceptible individuals.

Keywords: *Ayurveda,* Contact dermatitis, Cutaneous Adverse drug reaction, *Panchatikta Kashaya Basti, Vicharchika.*

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Introduction

Contact dermatitis is an inflammatory skin condition caused by an exogenous agent that directly or indirectly irritates or damages the skin. Allergic contact dermatitis is a delayed hypersensitivity reaction mediated by memory T lymphocytes in the skin (1). *Vicharchika* (Contact Dermatitis) is a condition marked by skin symptoms, including *Kandu* (itching) *Pidika* (the appearance of papules), *Shyava Varna* (dark discolouration), and *Bahusrava* (excessive discharge or oozing) (2).

The symptoms correlated with Vicharchika in Ayurveda are one of the *Kshudra Kushta.* It is mentioned that *kusta* (skin diseases) are inherently *tridosha* in nature. *Vicharchika* is primarily a *Kapha-dominant Tridosha* disorder (3).

Due to *Nidana Sevana (causative factors)* it leads to the *prakopa of tridosha*, and thus vitiated doshas get *ashraya in Twak, Rakta, Mamsa, and Ambu*, which together form the *Saptakodravyasangraha* in the pathogenesis of *Kushta* (skin disorders) causing *shaithalyatha* in these *dhatus* and as the chronicity progresses, the dhatus such as *Rasa, Rakta, Mamsa*, *Meda* (fat), *Asthi* (bone), *Majja* (bone marrow), and *Shukra* (reproductive tissue), gets gradually affected in the process of *Dhatu parinama* and eventually the entire body. The *Vaishamya* (imbalance) of the doshas is so intense that, over time, these tissues lose their vitality and begin to break down due to the excessive accumulation of *Kleda.* As the progression of the *Samprapti (Pathogenesis)* has reached the deeper *dhatus (constituents)*, and *Basti (Enema therapy)*, as a *Shodana Chikitsa,* is proving to have a good impact on the disease's pathogenesis.

Basti helps eliminate aggravated *doshas* through the Adhomarga and is especially valuable in disorders where all three *doshas* are involved, including *Vicharchika. Panchatikta Kashaya Basti,* traditionally classified as *Kushtaghna (4),* carries strong detoxifying and blood-cleansing actions that support the restoration of *doshic* balance.

Although *Vamana* and *Virechana* are indicated for *Vicharchika,* they may not be suitable for every patient. In such situations, *Basti* serves as a practical, well-tolerated, and effective therapeutic alternative in its management. (3)

This case report discusses a significant adverse reaction following the administration of *Panchatiktha Kashaya Basti,* which

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manifested as generalised pruritus (itching) and edema. The reaction was managed using Ayurvedic interventions, and the suspected Adverse Drug Reaction (ADR) was reported to the Peripheral Pharmacovigilance Centre. This case report could provide valuable insights for developing protocols to manage such reactions in routine clinical practice and support the promotion of ADR reporting within *Ayurveda*.

Case report

A 56-year-old female patient visited the Panchakarma Outpatient Department of KLE Shri B.M. Kankanwadi Ayurveda Mahavidyalaya with complaints of a persistent skin lesion on the dorsum of the bilateral foot and ankle joint, associated with pruritus, serous fluid discharge, erythema, and occasional bleeding for 2 years. The patient is not a known case of diabetes, hypertension, or systemic illness. No known allergies to drugs or foods. The patient had been undergoing conventional treatment for the past 5 years under various dermatologists, using topical hydrocortisone ointments and antihistamines, but experienced only temporary relief. Therefore, she visited the Ayurveda hospital seeking a more effective and long-lasting solution through Ayurvedic management, aiming not only for symptomatic relief but also to prevent recurrence of the condition.

Clinical Findings

Dermatological Findings: On the dorsum of the bilateral foot erythematous lesion with thickened skin, active serous discharge, and evidence of chronic inflammation.

Initial Systemic Examination: No systemic symptoms or signs of infection were found

Lab Investigations: Routine blood tests, liver, and renal function tests were within normal limits.

Diagnostic Assessment

The presence of symptoms such as *Kandu* (itching), *Pidika* (boils), *Syavavarna* (Blackish discolouration), and *Bahusrava* (discharge) led to the diagnosis of *Vicharchika* (Chronic Contact Dermatitis**).**

Details of Therapeutic Intervention

The treatment adopted in this condition is *Pancha Tikta Kashaya Basti.* Accordingly, it was incorporated into the *Kala Basti* Protocol, which include a total of 16 Basti: 6 *Niruha Basti* and 10 *Anuvasana Basti*. The *Anuvasana Basti* was administered using *Tiktaka Ghritha*-100 ml. After the ADR, the management was shifted to *Bahya parimarjana chikitsa,* which included *Sarvanga parisheka*, application of *Lepa,* along with the Internal administration of *Shamana* medicines.

Table 1: Ingredients of Panchatikta Kashaya Basti(4)

Ingredients	Dosage
Kwatha of Patola, Nimba, Bhunimba, Rasna, Saptachadda	4 *prasrutha*-384 ml
Kalka: Sarshapa	1/6 th of one pala -8 gm
Sneha: Tiktaka Ghritha	1 *Prasrutha* -96 ml

Table 2: Therapeutic Interventions done during the course of Treatment

Date	Complaints	Intervention	Observation
19/10/24	Patient complains of a chronic skin lesion on the dorsum of the Bilateral foot and Ankle joint	The patient was admitted to the hospital. *Anuvasana Basti using Tiktakaghrita*-100ml was administered	No complication noted
20/10/24	Patient complains of a chronic skin lesion on the dorsum of the Bilateral foot and Ankle joint	1st *Niruha Basti* was administered.	After 7 hours of *niruha basti* the Patient developed generalised itching over the body along with swelling and redness noted on the face, Fingers, chest, and lower limbs. *Basti* therapy was discontinued due to a suspected adverse reaction.
21/10/24 – 25/10/24	Patient complains of swelling and redness over the face, neck, legs, and chest, and itching Over the whole body	Started with *Bahya Parimarjana chikitsa*: 1. *Sarvanga Parisheka with Panchavalkala Kashaya* 2. Local application of a *Lepa* prepared from *Yashtimadhu Choorna* mixed with *Ksheera* was done and removed before it dried, followed by application of *Tiktaka Ghrita* to the face, neck, chest, and lower limbs. *Shamana chikitsa:* 1.*Haridra Khanda* 10 gm with milk, twice a day before food. 2.*Samshamani vati* 1 tablet thrice a day, after food. 3. *Avipathi choorna* -15 gm with honey on morning empty stomach	After 5 days of intervention, Complaints like itching, erythema, and swelling have reduced by 80- 85%
26/10/24	Complains of itching erythema, swelling, and discharge got reduced.	Patient was discharged from hospital Complains of Itching, erythema, swelling was completely resolved *Shamana* Medications for 14 days was advised	Itching, erythema, swelling was completely resolved

Timeline

For the presented case, the timeline of the events is detailed in Table 3

Table 3: Timeline of the events

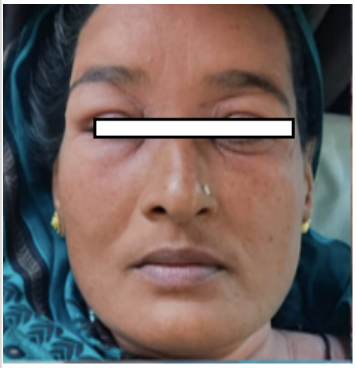
Date	Event	Details
19/10/24	Admission to the hospital	Patient was admitted to the hospital for the management of *Vicharchika (*Chronic contact dermatitis)
19/10/24	Initiation of the Treatment	*Panchatikta Basti* was prescribed according to the *Yoga Basti* Pattern. *Anuvasana Basti* with *Tiktaka ghritha*
20/10/24	Adverse Reaction Observed	Patient observed generalised itching, swelling, burning sensation, and redness over face, neck, fingers, Chest, lower limbs, Suggestive of an adverse drug reaction (ADR)
20/10/24	*Basti* Treatment was discontinued	On clinical examination, signs of an adverse drug reaction were observed. Consequently, *Basti* treatment was immediately discontinued, and emergency Ayurvedic interventions were initiated to manage the adverse event.
26/10/24	Discharge from Hospital	The patient was discharged under medical supervision, with a 14-day course of follow-up medications.
Post Discharge	Pharmacovigilance reporting	The adverse drug reaction was reported to the Peripheral Pharmacovigilance centre

Follow-up and Outcome

After five days of therapeutic intervention (Table 2) and *Shamana* medicines (Table 2) for ADR management, it was observed that swelling and redness over the face, neck, legs, and chest, and itching over the whole body were reduced [Figure 2], and the patient was later discharged. On 26th October 2023, with follow-up medications for 14 days mentioned in Table 3. After 14 days of follow-up medication, erythema, itching, and discharge over the dorsum of the bilateral foot and ankle joint had significantly decreased, with no recurrence of generalized itching.

Figure 1: Patient observed with symptoms of ADR such as swelling and itching over face, neck, chest (a) and (b) on the day of Administration of *Tikta Ksheera Basti*

a.



b.

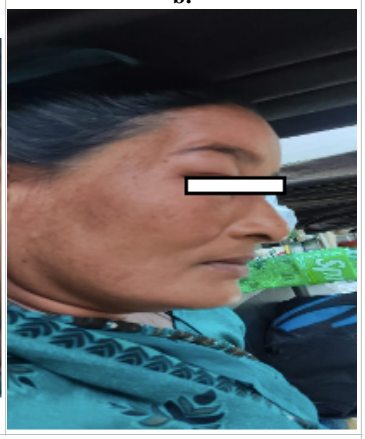
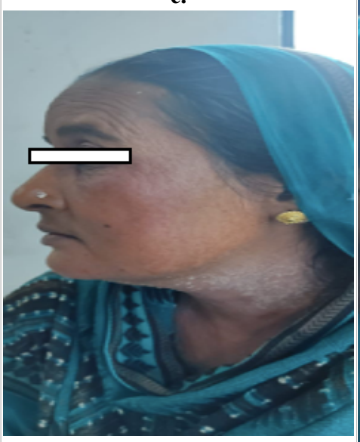
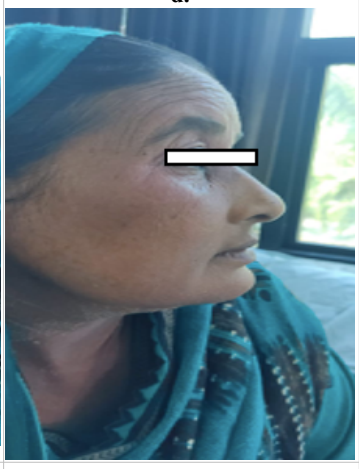


Figure 2: Reduction of symptoms c) and d) After 5 days of treatment

c.



d.



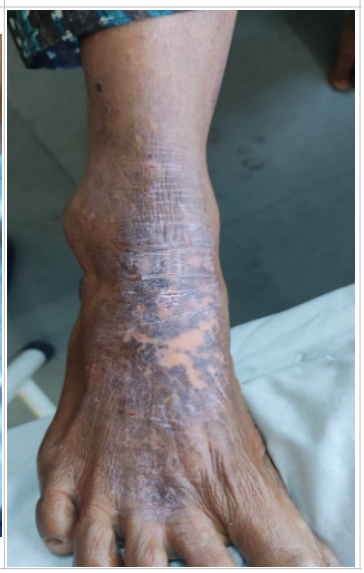
Follow-up Medications:

Duration	Medication	Dose
26 October 2023– 8 November 2023	*1. Haridra Khanda*	10 gm with milk, twice a day before food.
	2. Samshamani vati	1 tablet thrice a day, after food.
	3. Tiktaka Ghritha	External Application

Figure 3

a) on the day of admission

b) After 14 days of follow-up medications



Discussion

Panchatikta Kashaya Basti (4) is indicated in *Kushta* because of its predominant *Tikta rasa* ingredients, which exhibit *Ruksha, Laghu,* and *Sheeta* qualities that pacify *Pitta* and *Kapha doshas,* central to the pathogenesis of *Vicharchika (4)*. Its *Tikta Rasa* supports the *Pachana* (Pacification) of *Sama Mala* associated with the *Saptakodravya Sangraha* of *Kushta Samprapti.*

After administration of the *Basti,* the patient developed burning sensation, pain, swelling, and itching. These symptoms likely resulted from the excessive *Teekshna* (Sharpness) and *Ushna* (hot) properties of the formulation in a person with *Mridu Koshta (5)*. The use of *Sarshapa Kalka,* in a *Kapha-Pitta Prakriti* (constitution) Patient, residing in a *Jangala Desha* (dry area), and

during the season of *Greeshma Rtu,* further aggravated *Pitta and Rakta,* triggering the adverse drug reaction.

Management began with external therapies. *Prakshalana* using *Panchavalkala Kwatha*, known for its *Kashaya rasa* (astringent) and *sheeta veerya* (cooling action), reducing the *Sopha* (swelling) and *Daha* (burning) *(6)*. Its *tannins, flavonoids, glycosides, polyphenols,* and *phytosterols* (7), along with compounds such as *acacetin, bergenin, caffeic acid, catechin*, and *gallic acid*, contributed to strong anti-inflammatory activity (8). Application of *Tiktaka Ghrita* offered *Pitta* pacifying and soothing effects; its active molecules support anti-inflammatory action and tissue repair. *Yashtimadhu Churna* with *Ksheera* acted as *Tridoshahara,* restored *Rakta Dhatu,* and reduced *Vrana-related* symptoms *(9)* through its constituents' *glycyrrhizin, glycyrrhizic acid, isoliquiritin, and glabrene,* which possess *hydrocortisone*-like, anti-inflammatory effects (10).

Internal treatment focused on *Pitta* pacification and symptom control. *Haridra Khanda* helped relieve itching through the anti-allergic and anti-inflammatory actions of *curcumin* and *curcuminoids* (11,12). *Avipatti Choornam* balanced *Pitta,* aided by *saponin glycosides* from *Trivrit* that exert broad anti-allergic and anti-inflammatory activity (13). *Flavonoids in Sunthi, Pippali, Maricha, Twak, Patra, and Musta* enhance mucosal prostaglandins and reduce histamine release, while *e-cinnamaldehyde* and *o-methoxy cinnamaldehyde* from *Twak* and *Patra* further support anti-inflammatory action (14). *Samshamani Vati* was administered to reduce burning sensation and *Jwara*; it contains *alkaloids, glycosides, steroids,* and *flavonoids* (15). *Tinosporine* modulates *cytokines* and *COX enzymes,* and *β-sitosterol* suppresses prostaglandins, giving the formulation strong antioxidant and anti-inflammatory properties that are beneficial for skin conditions (16).

Table 4: Ingredient of the medicines used and their phytoconstituents

Drug Name	Latin name	Phytoconstituents
Panchavalkala (17)		
Vata	*Ficus benghalensis*	Tannin, Polyphenols, flavonoids, alkaloids, beta sitosterol, and stegmastrol (18)
Udumbara	*Ficus racemosa*	
Aswattha	*Ficus religiosa*	
Pareesha	*Thespesia populnea*	
Plaksha	*Ficus lacor*	
Tiktaka Ghritha (19)		
Patola	*Tricosanthes dioica*	Vitamin A, vitamin C, tannins, and saponin 7oxidihydrokarounidol-3-benzoate (20)
Nimba	*Azadiracta indica*	Nimbolinin, nimbin, nimbidin, nimbidol, sodium nimbinate, gedunin, salannin, and quercetin (21)
Katuka	*Picrorrhiza kurroa*	Apocynin, glycosides, cucurbitacins, iridoids, alkaloids, terpenes, and phenolic (22)
Darvi	*Berberis aristata*	Berbamine, berberine, armoline, palmatine, oxycanthine, ketoberberine benzoate, quercetin, flavonoids, terpenoids, glycosides, saponins (23)
Duralaba	*Fagonia cretica*	Saponins I & II Alkaloids (Harmine), Aminoacids (Alanine, glycine, leucine, arginine, isoleucine, Lysine, Phenylalanine, proline, tyrosine, and valine), Terpenoids of oleanane group (24).
Parpata	*Fumaria indica*	Papracine, paprazine, sitosterol, stigmasterol, campesterol (25).
Trayamana	*Gentina kurroora*	Tannins, Alkaloids, Saponins, Glycosides (Gentiopicrine, Gentianine), Terpenes, Flavonoids, Phenolics, Carbohydrates, Genianic Acid, Pectin (26)
Trayanti	*Gentina kurroo*	Tannins, Alkaloids, Saponins, Glycosides (Gentiopicrine, Gentianine), Terpenes, Flavonoids, Phenolics, Carbohydrates, Genianic Acid, Pectin (26)
Musta	*Cyperus rotundus*	4α, 5α, Oxidoeudesm-11-en-3α-ol, Cyperene-1, Cyperene-2, β-selinene, Cyperenone, α-cyperone (27).
Bhunimba	*Andrographis paniculata*	Diterpenes, lactones, flavonoids, and xanthones, Flavonoids, Alkanes, ketones, and aldehydes (28)
Kalinga	*Holarrhena antidysentrica*	Flavonoids, triterpenoids, phenolic acids, tannin, resin, coumarins, saponins, and ergosterol (29) (30)
Kana	*Piper longum*	Piperine, piperlonguminine, piperlongumine, and methyl-3,4,5- trimethoxycinnamate (31)
Chandana	*Santalum Alba*	Sesquiterpene alcohols like alpha and beta santalols, bergamotols, and several of their stereoisomers (32)
Yashtimadhu	*Glycyrrhiza glabra*	Triterpene saponins, flavonoids, polysaccharides, pectins, simple sugars, Liquiritin and isoliquiritin, glabridin and hispaglabridins A and B (33)
Haridra Khanda (34)		
Haridra	*Curcuma longa*	Ascorbic acid, Eugenol, Epiprocurcumenol, O-coumaric acid, Cinnamic acid, Cuminyl alcohol, Curcumene, Curcumenol, Curcumin, Curdione (35)
Shunti	*Zingiber officinale*	6-shogaol,6-gingerol,6-dehydroshogaol, β-bisabolene, α-cumene, zingiberene, α-farnesene, and β-sesquiphellandrene(36)
Maricha	*Piper nigrum*	Piperine, Flavonoids, Piperanine, Alkaloids, Piperettine, Amides Piperylin, A Lignans, Piperolein, B Phenols, Pipericine (37)(38)
Pippali	*Piper longum*	Piperine, piperlonguminine, piperlongumine, and methyl-3,4,5-trimethoxycinnamate (31)
Twak	*Cinnamomum zeylanicum*	Cinnamaldehyde,cinnamate, cinnamic acid, and numerous essential oils, Eugenol (39)
Ela	*Elettaria cardamom*	Flavonoids hesperidin, thymol, galangin, tectochrysin, pinocembrin, acetine, rutin, chrysin, apigenin, kaempferol and quercetin(40)
Patra	*Cinnamomum tamala*	Alkaloids, flavonoids, steroids, polyphenols, flavones and flavonols, tannins, saponins, glycosides, carbohydrates, proteins and amino acids (41)
Vidanga	*Embelia ribes*	Embelin(2,5-dihydroxy-3-undecyl-1,4-benzoquinone),a naturally occurring alkyl-substituted hydroxy benzoquinone, & Quercitol, Fatty ingredients, Alkaloid - Schristembine, a Resinoid, Tannins (42)
Trivrit	*Operculina turpethum*	Tannins, Flavonoids, Carbohydrate, Glycosides, Alkaloids, Acidic compounds, Steroids, Saponin and Terpenoids (43)

Haritaki	*Terminalia chebula*	Tannins (gallic acid, chebulagic acid, punicalagin, chebulanin, corilagin, neochebulinic acid, ellagic acid, chebulinic acid, 1,2,3,4,6-penta-O-galloyl-β-D-glucose, 1,6-di-o-galloyl-D-glucose, casuarinin (44)
Vibitaki	*Terminalia bellerica*	Terpenoids, including eucalyptol, linalool, methoxycitronellal, terpinene-4-ol, camphor, pinocarveol, carvone, endo borneol, L-fenchone, hyscylene, patchoulane, p-cumic aldehyde, and phenylbutanal(45)
Amalaki	*Emblica officinalis*	Alkaloids such as phyllantidine and phyllantine, gallic acid, ellagic acid, chebulic, chebulagic, and chebulinic acids,flavonoids (Kaempferol 3 O alpha L (6"methyl) rhamnopyranoside) (46)
Nagakesara	*Mesua ferrea*	Coumarins, flavonoids, triterpenoids, and mangiferic acid (47)
Musta	*Cyperus rotundus*	Flavonoids, alkaloids, betacyanins, quinones, terpenoids, and phenols (48)
Avipatti churnam (49)		
Vyosha	*Shunti*	6-shogaol,6-gingerol,6-dehydroshogaol, β-bisabolene, α-cumene,zingiberene,α-farnesene, and β-sesquiphellandrene(36)
	Maricha	Piperine, Flavonoids, Piperanine, Alkaloids, Piperettine, Amides Piperylin, A Lignans, Piperolein, B Phenols, Pipericine (37,38)
	Pippali	Piperine, piperlonguminine, piperlongumine, and methyl-3,4,5-trimethoxycinnamate (31)
Trijataka	*Twak*	Cinnamaldehyde,cinnamate, cinnamic acid, and numerous essential oils, Eugenol (39)
	Ela	Flavonoids hesperidin, thymol, galangin, tectochrysin, pinocembrin, acetine, rutin, chrysin, apigenin, kaempferol and quercetin (40)
	Patra	Alkaloids, flavonoids, steroids, polyphenols, flavones and flavonols, tannins, saponins, glycosides, carbohydrates, proteins and amino acids (41)
Ambhoda	*Cyperus rotundus*	Flavonoids, alkaloids, betacyanins, quinones, terpenoids, and phenols (27)
Krimigna	*Embelia ribes*	Embelin(2,5-dihydroxy-3-undecyl-1,4-benzoquinone), a naturally occurring alkyl-substituted hydroxy benzoquinone, & Quercitol, Fatty ingredients, Alkaloid - Schristembine, a Resinoid, Tannins (42)
Amalaki	*Emblica officinalis*	Alkaloids such as phyllantidine and phyllantine, gallic acid, ellagic acid, chebulic, chebulagic, and chebulinic acids,flavonoids (Kaempferol 3 O alpha L (6"methyl) rhamnopyranoside) (46)
Trivrt	*Operculina turpethum*	Tannins, Flavonoids, Carbohydrate, Glycosides, Alkaloids, Acidic compounds, Steroids, Saponin and Terpenoids (43)
Shamshamani vati (49)		
Guduchi	*Tinospora cordyfolia*	B-sitosterol, clerodane furano diterpene, columbin, tinosporine, tinosporide, tinosporaside, cordifolide, cordifol, heptacosanol, and furano diterpene (50)

Conclusion

This case report concludes that the adverse drug reaction (ADR) occurred due to the Ushna and Tikshna properties of *Sarshapa Kalka* in *Panchatikta Kashaya Basti*, administered without adequate consideration of the patient's *Prakruti*, *Desha*, *Kala*, and *Rtu*. This highlights the importance of applying *Amshamsha Kalpana* (Fractional *dosha guna* analysis) before planning any treatment to ensure precise drug selection and dosage form. The inadequate assessment of these factors likely led to *Pitta* and *Rakta* vitiation, resulting in the observed reaction. However, the condition was effectively managed through *Bahirparimarjana* and *Antarparimarjana Chikitsa*. It also emphasises the importance of ongoing research and ADR monitoring in *Ayurveda* to ensure patient safety and improve treatment protocols. The proper fixation of dosage in the Basti procedure is crucial, as it ensures therapeutic efficacy while minimising the risk of adverse effects, and personalises the treatment according to the individual's condition and constitution.

Informed Consent

The patient provided written informed consent for the publication of this case report.

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Nil

Conflicts of interest

There are no conflicts of interest

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