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TO EVALUATE THE ADD ON EFFECT OF *PANCHVALKAL TAILA ABHYANGA* WITH *TAKRADHARA* IN *EKAKUSHTHA*

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ABSTRACT

Background *Ekakushtha*, described under *Kshudra Kushtha* in classical Ayurvedic texts, is a *Vata-Kapha Pradhana Tridoshaja Vyadhi* with predominant *Rakta Dushti*. Clinically, it closely resembles psoriasis, a chronic immune-mediated inflammatory skin disorder characterized by erythematous plaques with silvery scaling. Modern treatment provides symptomatic relief but is associated with recurrence and adverse effects. Classical *Shodhana Chikitsa* is effective but not suitable for all patients. Therefore, a safe and practical *Shamana Bahya Chikitsa* approach combining *Panchavalkala Taila Abhyanga* and *Takradhara* was selected for evaluation. **Aim and Objectives** To evaluate the add-on effect of *Panchavalkala Taila Abhyanga* with *Takradhara* in the management of *Ekakushtha (Psoriasis)*. To assess the efficacy of *Panchavalkala Taila Abhyanga*. To evaluate the additional therapeutic benefit of combining it with *Takradhara*. **Methodology** A randomized controlled clinical trial was conducted on 60 diagnosed patients of *Ekakushtha*, divided equally into two groups. Group A received *Panchavalkala Taila Abhyanga* followed by *Takradhara*, while Group B received *Takradhara* alone. Duration of treatment was 14 days with follow-up on the 21st day. Subjective parameters including *Matsyashakalopama*, *Mandala*, *Kandu*, *Bahalatva*,

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Aswedana, and *Rukshata* were assessed using gradation scales. PASI score was used as an objective parameter. Statistical analysis was performed using Wilcoxon Signed Rank Test and Paired t-test with significance set at $p < 0.05$. **Results** Both groups showed statistically significant improvement ($p < 0.001$) in subjective and objective parameters. However, Group A demonstrated superior results with greater reduction in scaling, itching, dryness, erythema, and PASI score compared to Group B. No adverse effects were observed during the study period. **Discussion** The combined therapy works through *Vata-Kapha Shamana*, *Rakta Prasadana*, *Srotoshodhana*, and *Manasika Prashamana*. *Panchavalkala Taila Abhyanga* improved *Twak Poshana* and reduced *Rukshata*, while *Takradhara* regulated stress response and balanced *Prana Vata* and *Sadhaka Pitta*. The synergistic mechanism resulted in better clinical outcomes and improved quality of life.

Conclusion The study concludes that *Panchavalkala Taila Abhyanga* when used as an adjuvant to *Takradhara* provides significantly better therapeutic outcomes in *Ekakushtha (Psoriasis)* compared to *Takradhara* alone. The aim and objectives of the study were successfully achieved.

Keywords: *Ekakushtha*, *Panchavalkala Taila*, *Takradhara*, Psoriasis, *Abhyanga*, *Rakta Dushti*

INTRODUCTION

Skin is the largest organ of the human body and serves as the first protective barrier against environmental hazards, microorganisms, and physical injuries. It plays an important role in thermoregulation, sensation, immunity, and overall homeostasis. In *Ayurveda*, skin is referred to as *Twak*, which is considered the seat of various disorders including *Kushtha Roga*. Acharya *Sushruta* described seven layers of *Twacha* and explained that pathological changes in these layers lead to different types of skin diseases. Among these, *Ekakushtha* is classified under *Kshudra Kushtha* and is characterized by classical features such as *Aswedanam*, *Matsyashakalopamam*, and *Mahavastu*.¹

Ekakushtha is described as a *Tridoshaja Vyadhi* with predominance of *Vata* and *Kapha* along with involvement of *Rakta Dhatu*. The pathogenesis begins with *Agnimandya*, leading to *Ama Utpatti*, followed by *Dosha Dushti* and obstruction in *Raktavaha* and *Mamsavaha Srotas*. This ultimately manifests in the *Twak* as scaling, dryness, erythema, and thickened plaques.

Clinically, *Ekakushtha* closely resembles psoriasis, a chronic autoimmune inflammatory skin disorder characterized by erythematous plaques with silvery scales and recurrent episodes. The chronic nature of the disease and its visible manifestation significantly affect physical comfort, psychological well-being, and quality of life.²

Modern medical management of psoriasis includes topical corticosteroids, immunosuppressants, and phototherapy. Although these modalities provide symptomatic relief, they are often associated with recurrence and potential adverse effects with long-term use. In *Ayurveda*, management of *Kushtha* involves *Shodhana*, *Shamana*, and *Nidana Parivarjana*. While *Shodhana Chikitsa* such as *Vamana* and *Virechana* is highly effective, it may not be suitable for all patients due to age, comorbidities, or physical debility. Hence, safe and practical *Shamana Bahya Chikitsa* procedures assume clinical importance.³

Takradhara, a classical Panchakarma procedure, possesses *Vata-Pitta Shamaka*, *Rakta Prasadaka*, and *Manasika Prashamana* properties. It has a calming effect on the neuroendocrine system and helps reduce stress, which is a known aggravating factor in psoriasis. *Panchavalkala Taila*, prepared from the bark of five *Ficus* species, has *Kashaya Rasa*, *Sheeta Virya*, *Raktashodhaka*, and *Vranaropaka* properties. When used in the form of *Abhyanga*, it improves *Srotoshodhana*, enhances microcirculation, nourishes *Twak Dhatu*, and reduces *Rukshata* and inflammation. Therefore, the present study was undertaken to evaluate the add-on effect of *Panchavalkala Taila Abhyanga* with *Takradhara* in the management of *Ekakushtha (Psoriasis)*.⁴

RESEARCH QUESTION

Does *Panchavalkal Taila Abhyanga* as adjuvant therapy to *Takradhara* is effective in the management of *Ekakushtha (Psoriasis)*?

HYPOTHESIS

Panchavalkal Taila Abhyanga followed by *Takradhara* is more effective than only *Takradhara* in the management of *Ekakushtha (Psoriasis)*.

NULL HYPOTHESIS (H₀)

Panchavalkal Taila Abhyanga followed by *Takradhara* is less effective than only *Takradhara* in the management of *Ekakushtha (Psoriasis)*.

ALTERNATE HYPOTHESIS (H₁)

Panchavalkal Taila Abhyanga followed by *Takradhara* is equally effective to *Takradhara* in the management of *Ekakushtha* (Psoriasis).

AIM

To evaluate the add on effect of *Panchvalkal Taila Abhyanga* with *Takradhara* in *Ekakushtha*.

OBJECTIVES

- To evaluate the Efficacy of *Panchavalkala Taila Abhyanga* in the patients of *Ekakushtha*.
- To evaluate the add on effect of *Panchvalkal Taila Abhyanga* with *Takradhara* in *Ekakushtha*.

MATERIAL AND METHODS

Study Design

The present study was a randomized controlled clinical trial conducted on 60 diagnosed patients of *Ekakushtha* (Psoriasis) selected from OPD & IPD of Department of Panchakarma, CBPACS. Patients fulfilling inclusion criteria were randomly divided into two groups (30 each) by computerized randomization. The total duration of study was 21 days including follow-up.

Diagnostic Criteria

Diagnosis was based on classical features of *Ekakushtha*:

- *Matsyashakalopamam* (Scaling)
- *Mandala* (Erythema)
- *Kandu* (Itching)
- *Bahalatva* (Epidermal thickening)
- *Aswedana* (Anhydrosis)
- *Rukshata* (Dryness)

Sample Selection

Inclusion Criteria

- Moderate signs and symptoms of *Ekakushtha* (*Aswedanam*, *Mahavastu*, *Matsyashakalopamam*)

- Age group 20–50 years

Exclusion Criteria

- Uncontrolled systemic illnesses
- Psoriatic arthritis
- Pregnant & lactating mothers
- Patients on corticosteroids or immunosuppressants

Withdrawal Criteria

- Dropouts replaced
- Serious adverse effects led to exclusion

Intervention

Group A: *Panchavalkala Taila Abhyanga* followed by *Takradhara* for 14 days

Group B: Only *Takradhara* for 14 days

Assessments were done on Day 0, Day 14 and Day 21 (follow-up).

Drug Details

Contents of *Panchavalkala Taila*

- *Vata – Ficus bengalensis*
- *Ashwatha – Ficus religiosa*
- *Udumbara – Ficus racemosa*
- *Plaksha – Ficus lacor*
- *Parisha – Ficus arnottiana*

Base: Coconut oil

Prepared/purchased from GMP certified pharmacy.

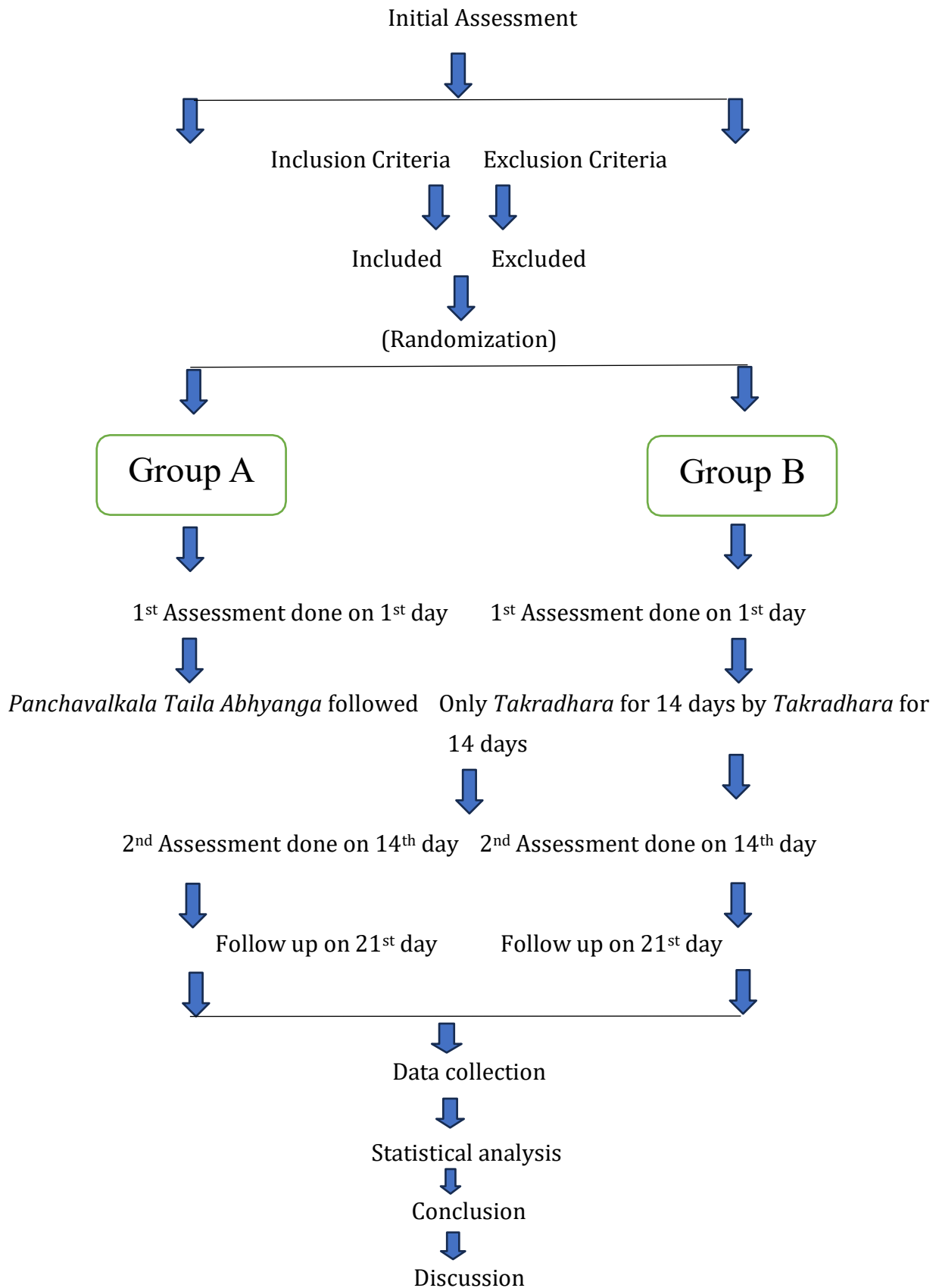
Preparation of *Takra*

Dry endocarp of *Amlaki* was boiled and reduced to 1/6, mixed with equal quantity of fermented buttermilk and used for *Dhara* after *Abhyanga*.

Expected Outcome

Panchavalkala Taila Abhyanga as add-on therapy to *Takradhara* was expected to show better clinical improvement in *Ekakushtha* patients compared to *Takradhara* alone.

METHODOLOGY



Assessment Criteria

Improvement was assessed based on relief in signs, symptoms and *Dosha–Dushya Dushti Lakshana*. Scoring was assigned according to severity.

Subjective Criteria

Criteria	Scale	Score
<i>Matsyashakalopama</i> (Scaling)	No scaling	0
	Scaling off between 16–28 days	1
	Scaling off between 8–15 days	2
	Scaling off between 5–7 days	3
	Scaling off between 1–4 days	4
<i>Mandala</i> (Erythema)	Normal skin	0
	Faint / Near normal	1
	Blanching + Red colour	2
	No blanching + Red colour	3
	Red colour + Subcutaneous	4
<i>Kandu</i> (Itching)	No itching	0
	Mild	1
	Moderate	2
	Severe frequent	3
	Very severe disturbing sleep	4
<i>Bahalatva</i>	No thickening	0
	Mild	1
	Moderate	2
	Very thick	3
	Very thick with induration	4

<i>Aswedana</i>	Normal	0
	Improvement	1
	Present in few lesions	2
	Present in all lesions	3
	Present in lesion and uninvolved skin	4
<i>Rukshata</i>	No line on scrubbing	0
	Faint line	1
	Line visible, words can be written	2
	Excessive dryness with itching	3
	Crack formation	4

OBSERVATION AND RESULT

Variable	Category	Group A (n=30)	%	Group B (n=30)	%
Participation	Registered	65	—	—	—
	Completed	60	—	—	—
Age	20-25	3	10.0%	3	10.0%
	26-35	9	30.0%	8	26.7%
	36-50	8	26.7%	2	6.7%
Sex	Male	18	60.0%	17	56.7%
	Female	12	40.0%	13	43.3%
Marital Status	Married	21	70.0%	20	66.7%
	Unmarried	9	30.0%	10	33.3%
Religion	Hindu	24	80.0%	25	83.3%
	Muslim	4	13.3%	3	10.0%
	Others	2	6.7%	2	6.7%

RESULT**Comparative Relief in Symptoms (Group A vs Group B)**

Symptoms	Group	N	Mean BT	Mean AT	Relief %	S.D. ±	S.E. ±	t	P value
Aswedana	A	14	2.28	0.90	60.52	0.60	0.16	7.60	<0.001
	B	13	2.23	1.00	55.17	0.59	0.17	7.40	<0.001
Matsyashakalopama	A	15	3.05	1.35	55.73	0.55	0.14	9.90	<0.001
	B	13	3.00	1.58	48.71	0.52	0.14	10.15	<0.001
Mandala	A	13	2.50	1.10	56.00	0.73	0.20	6.45	<0.001
	B	14	2.45	1.23	50.00	0.73	0.20	6.12	<0.001
Bahalatva	A	12	1.88	0.82	56.38	0.58	0.17	4.05	<0.001
	B	15	1.85	0.92	50.08	0.56	0.15	3.86	<0.001
Kandu	A	15	2.73	0.93	65.93	0.75	0.21	8.70	<0.001
	B	16	2.70	1.07	61.11	0.75	0.21	8.21	<0.001
Rukshata	A	13	2.18	1.05	51.83	0.85	0.24	3.95	<0.001
	B	12	2.15	1.23	42.85	0.86	0.24	3.85	<0.001
Daha	A	14	2.30	0.63	72.60	0.86	0.22	6.50	<0.001
	B	13	2.23	0.69	68.96	0.87	0.24	6.34	<0.001
Srava	A	11	2.25	0.58	74.22	0.62	0.18	4.15	<0.01
	B	11	2.23	0.69	68.63	0.63	0.19	3.96	<0.01

In this present study, both groups showed statistically highly significant improvement ($p < 0.001$) in all major symptoms. However, Group A (*Panchavalkala Taila Abhyanga + Takradhara*) demonstrated comparatively higher percentage relief across most symptoms. Maximum improvement in Group A was observed in Srava (74.22%) and Daha (72.60%), followed by Kandu (65.93%).

In Group B (*Takradhara alone*), the highest relief was noted in Daha (68.96%) and Srava (68.63%), followed by Kandu (61.11%). Overall, the combined therapy provided superior symptomatic relief compared to Takradhara alone.

Comparative Analysis of Subjective Parameters

Symptom	Group	Mean BT	Mean AT	Median BT	Median AT	SD (BT)	SE (BT)	Wilcoxon W	P-Value	% Effect	Result
Matsyashakalopamam	A	3.05	1.35	3.00	1.00	0.55	0.14	-4.944 ^b	0.00000077	55.73	Sig
	B	3.00	1.58	3.00	1.00	0.52	0.14	-4.944 ^b	0.00000077	48.71	Sig
Mandala	A	2.50	1.10	2.00	1.00	0.73	0.20	-4.964 ^b	0.00000069	56.00	Sig
	B	2.45	1.23	2.00	1.00	0.73	0.20	-4.964 ^b	0.00000069	50.00	Sig
Kandu	A	2.73	0.93	3.00	1.00	0.75	0.21	-4.852 ^b	0.00000122	65.93	Sig
	B	2.21	0.94	2.00	1.00	0.55	0.09	-4.852 ^b	0.00000122	57.53	Sig
Bahalatva	A	1.88	0.82	2.00	1.00	0.58	0.07	-4.824 ^b	0.00000141	56.38	Sig

	B	2.00	0.88	2.00	1.00	0.79	0.14	-4.824 ^b	0.00000141	56.06	Sig
Aswedana	A	2.28	0.90	2.00	1.00	0.60	0.16	-5.138 ^b	0.00000028	60.52	Sig
	B	2.27	0.97	2.00	1.00	0.52	0.09	-5.138 ^b	0.00000028	57.33	Sig
Rukshata	A	2.18	1.05	2.00	1.00	0.85	0.24	-4.802 ^b	0.00000157	51.83	Sig
	B	2.24	1.09	2.00	1.00	0.61	0.11	-4.802 ^b	0.00000157	51.35	Sig

In this present study, all subjective parameters in both groups showed statistically significant improvement as the p-value for all comparisons was less than 0.05 using the Wilcoxon Signed Rank Test. This confirms that both *Panchavalkala Taila Abhyanga + Takradhara* (Group A) and *Takradhara alone* (Group B) were effective in reducing symptoms of *Ekakushtha*. However, comparatively higher percentage relief was observed in Group A in almost all parameters, especially in *Kandu* (65.93%), *Aswedana* (60.52%), and *Matsyashakalopamam* (55.73%), indicating better therapeutic response with the combined therapy.

Table No.60. Showing Sum of Subjective Parameters

Group	Phase	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
Group A – Panchavalkala Taila Abhyanga + Takradhara	BT	13.42	14.00	2.38	0.41	-5.027 ^b	0.00000050	55.15	Sig
	AT	6.02	6.00	2.58	0.45				
Group B – Takradhara Alone	BT	13.36	14.00	2.43	0.42	-5.027 ^b	0.00000050	53.97	Sig
	AT	6.15	6.00	2.64	0.46				

Given that the *observations* are measured on an ordinal scale (gradations), the Wilcoxon Signed Rank Test was utilized to assess efficacy. As indicated in the table above, the p-value is less than 0.05. Therefore, we can conclude that the observed effect is significant.

Table No.61. Showing PASI Score

Group	Phase	Mean	N	SD	SE	t-Value	P-Value	% Effect	Result
Group A - Panchavalkala Taila Abhyanga + Takradhara	BT	11.82	30	7.98	1.39	7.763	0.00000075	71.28	Sig
	AT	3.39	30	2.55	0.44				
Group B - Takradhara Alone	BT	11.80	30	7.95	1.37	7.763	0.00000072	68.45	Sig
	AT	3.73	30	2.62	0.46				

As the *observations* are quantitative, we employed the Paired t-Test to evaluate efficacy. The table above shows that the p-value is less than 0.05. Therefore, we can conclude that a significant change in the PASI Score has been observed.

Table No.62. Showing percent effect post treatment

Overall Improvement	Group A (n=30) - Panchavalkala Taila Abhyanga + Takradhara	% (Group A)	Group B (n=30) - Takradhara Alone	% (Group B)
Cured	0	0.0%	0	0.0%
Markedly Improved	25	83.3%	22	73.3%
Mild Improved	4	13.3%	6	20.0%
Unchanged	1	3.4%	2	6.7%
Total	30	100%	30	100%

Table No.63. Showing overall improvement %

Parameter	Group A - Panchavalkala Taila Abhyanga + Takradhara	% Effect (A)	P- Val ue (A)	Signific ance	Group B - Takradhara Alone	% Eff ect (B)	P- Val ue (B)	Signific ance
Matsyashaklo pamam	55.73	0.0000 0077	Sig	48.68	0.0000 0077	Sig		
Mandala	56.00	0.0000 0069	Sig	53.25	0.0000 0069	Sig		
Kandu	65.93	0.0000 0122	Sig	57.53	0.0000 0122	Sig		
Bahalatva	56.38	0.0000 0141	Sig	56.06	0.0000 0141	Sig		
Aswedana	60.52	0.0000 0028	Sig	57.33	0.0000 0028	Sig		
Rukshata	51.83	0.0000 0157	Sig	51.35	0.0000 0157	Sig		
Sum of Subjective Parameters	55.15	0.0000 0050	Sig	53.97	0.0000 0050	Sig		
PASI Score	71.28 (Best)	0.0000 0001	Sig	68.45	0.0000 0001	Sig		

In this present study, Group A performed better overall with a higher percentage of patients showing marked improvement (33.3% vs. 23.1%) and comparable moderate improvement (46.7% vs. 46.1%). Group B showed slightly more mild improvement (30.8% vs. 20%), but Group A's higher marked improvement establishes it as the superior therapy.

EFFECT SIZE:**Table No.64. Showing Effect size**

Result	Group A - Panchavalkala Taila Abhyanga + Takradhara	% (A)	Effect Size (A)	Group B - Takradhara Alone	% (B)	Effect Size (B)	Total no. of patients	Total %
Complete remission (100%)	0	0.0	-	0	0.0	-	0	0.0
Marked improvement ($\geq 76\%$)	5	33.3	1.45	3	23.1	1.20	8	28.6
Moderate improvement (51-75%)	7	46.7	1.30	6	46.1	1.10	13	46.4
Mild improvement (26-50%)	3	20.0	0.95	4	30.8	0.88	7	25.0
Unchanged (<25%)	0	0.0	-	0	0.0	-	0	0.0
Total	15	100	-	13	100	-	28	100

In this present study, the effect size values were consistently higher in Group A compared to Group B, particularly for *marked improvement* (1.45 vs. 1.20) and *moderate improvement* (1.30 vs. 1.10). This indicates that Panchavalkala Taila Abhyanga + Takradhara (Group A) produced stronger and more reliable clinical benefits compared to Takradhara alone (Group B).

DISCUSSION

Participation of Patients In this present study, 65 patients were registered and 60 completed the trial, showing good compliance and acceptability of the treatment. The low dropout rate suggests that *Panchavalkala Taila Abhyanga* and *Takradhara* were safe, well tolerated, and practically feasible.

Age-wise Distribution Most patients were in the 26–35 years age group, indicating higher occurrence of *Ekakushtha* in *Yuva Vaya*. Stress, irregular diet, and disturbed sleep in this age group may aggravate *Vata* and *Kapha*. This clinically correlates with stress-related immune involvement seen in psoriasis.

Sex Distribution A slight male predominance was observed. Greater occupational exposure, stress, and irregular lifestyle among males may contribute to *Dosha Dushti*, especially *Kapha* and *Vata*, leading to chronic skin disorders like *Ekakushtha*.

Marital Status, Education and Occupation Most patients were married and educated, suggesting better health awareness. Service holders and labourers were more affected, where stress and irregular routines may disturb *Pitta* and *Vata*, ultimately vitiating *Rakta* and *Twak*.

DISCUSSION ON RESULT

Relief in Subjective Parameters

In this present study, both groups showed statistically highly significant improvement ($p < 0.001$) in all subjective parameters. However, Group A showed comparatively higher percentage relief across almost all symptoms.

Group A demonstrated maximum improvement in:

- *Srava* – 74.22%
- *Daha* – 72.60%
- *Kandu* – 65.93%
- *Aswedana* – 60.52%

Group B showed highest improvement in:

- *Daha* – 68.96%
- *Srava* – 68.63%
- *Kandu* – 61.11%

Clinically, reduction in *Kandu* indicates pacification of *Kapha* and inflammatory mediators. Decrease in *Matsyashakalopamam* reflects normalization of epidermal turnover.

Improvement in *Mandala* and *Daha* indicates reduction of *Pitta* and *Rakta Dushti*. Better performance of Group A suggests synergistic action of local and systemic therapy.

Sum of Subjective Parameters

The overall subjective improvement was 55.15% in Group A and 53.97% in Group B. Though both were significant, Group A consistently showed better trend. This confirms that adding *Panchavalkala Taila Abhyanga* enhances therapeutic outcome.

Objective Parameter – PASI Score

PASI score reduction was 71.28% in Group A and 68.45% in Group B, both statistically highly significant. Greater reduction in Group A confirms superior objective clinical improvement. This demonstrates that combined therapy not only reduces symptoms but also decreases severity and extent of lesions.

Overall Improvement Pattern

Marked improvement was observed in 83.3% patients in Group A compared to 73.3% in Group B. Effect size was also higher in Group A, indicating stronger and more reliable clinical benefit.

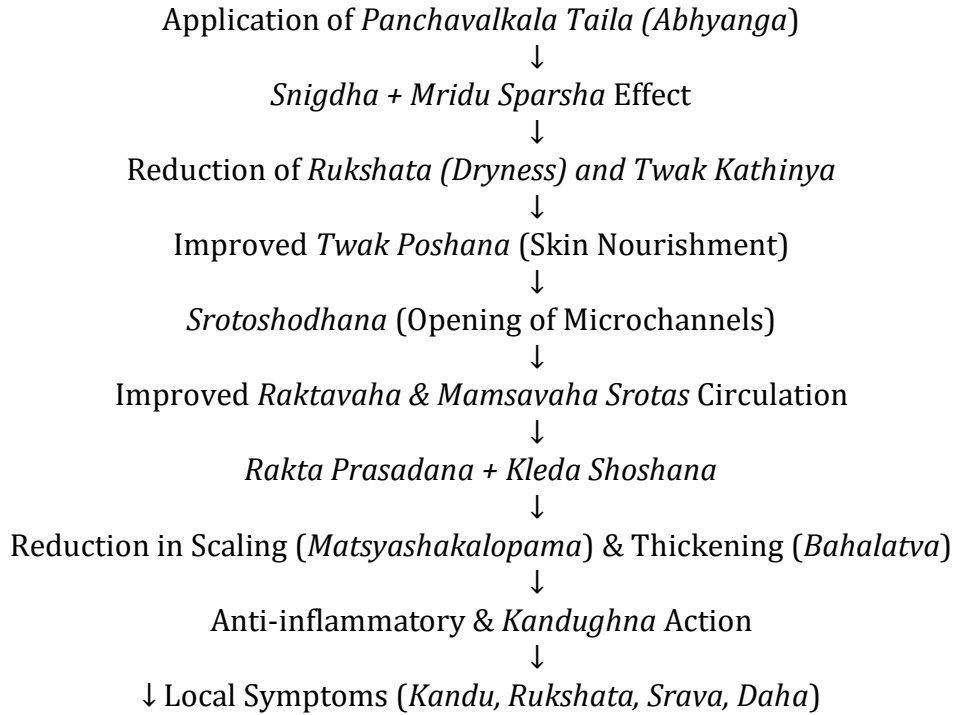
Therapeutic Interpretation

From Ayurvedic perspective, *Ekakushtha* involves *Kapha-Vata Dushti* along with *Rakta Dushti*. *Panchavalkala Taila Abhyanga* acts locally by reducing scaling, dryness, and inflammation through *Rakta Prasadana* and *Kleda Shoshana*. *Takradhara* acts systemically by pacifying *Pitta*, calming the nervous system, and reducing stress. Therefore, the combined therapy addresses both local pathology and systemic triggers.

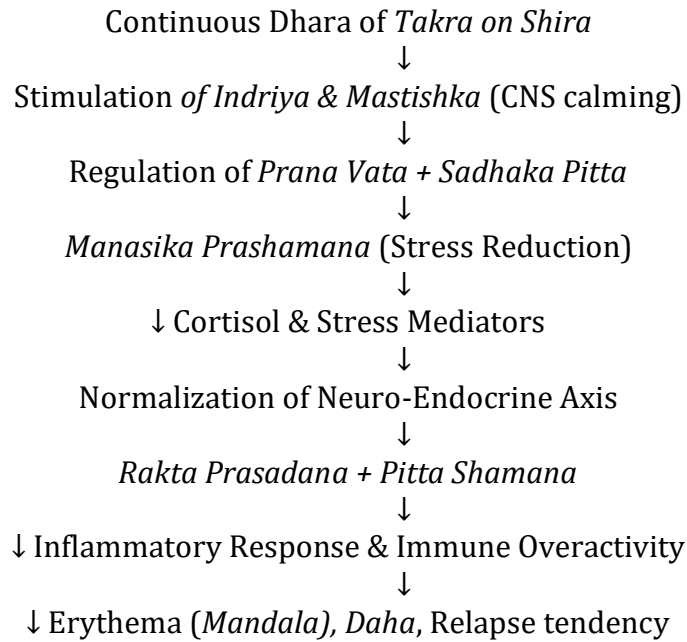
Final Clinical Conclusion

In this present study, both therapies were effective in managing *Ekakushtha*. However, the combination of *Panchavalkala Taila Abhyanga* with *Takradhara* provided comparatively superior relief in both subjective and objective parameters. The results support the hypothesis that combined therapy offers better clinical outcomes than *Takradhara* alone in the management of *Ekakushtha*.

Panchavalkala Taila Abhyanga



Takradhara



CONCLUSION

In this present study, both groups showed statistically highly significant improvement ($p < 0.001$), but Group A treated with *Panchavalkala Taila Abhyanga + Takradhara* demonstrated comparatively better results. Relief in scaling was 55.73% versus 48.68%, itching 65.93% versus 57.53%, and aswedana 60.52% versus 57.33%. Overall subjective

improvement was 55.15% in Group A compared to 53.97% in Group B. PASI score reduction was 71.28% (11.82 to 3.39) in Group A versus 68.45% (11.80 to 3.73) in Group B, and marked improvement was observed in 83.3% patients of Group A compared to 73.3% in Group B. Thus, the Null Hypothesis (H_0) was rejected and the Alternate Hypothesis (H_1) was accepted, confirming that *Panchavalkala Taila Abhyanga* as an add-on therapy enhanced the efficacy of *Takradhara* in the management of *Ekakushtha*.

CONFLICT OF INTEREST -NIL

SOURCE OF SUPPORT -NONE

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