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Research Article

A COMPARATIVE STUDY TO EVALUATE EFFICACY OF *PRACHANNA KARMA* FOLLOWED BY *CHIRABILVA LEPA* AND *GUNJA LEPA* IN THE MANAGEMENT OF *INDRALUPTA* W.S.R TO ALOPECIA AREATA

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ABSTRACT

Ayurveda is a traditional system of medicine with origins dating back approximately 5,000 years. Ayurvedic practices include a wide range of treatments such as herbal remedies, dietary guidelines, yoga meditation, detoxification *(Panchakarma),* and lifestyle modifications. Rather than focusing only on treating disease, Ayurveda emphasizes maintaining health through proper nutrition, daily routines (*Dinacharya*) and seasonal practices (*Ritucharya*). Hairfall or alopecia (*Indralupta*), is a common dermatological issue that can cause significant emotional distress. It can stem from various factors, including genetics, diet, stress, and underlying medical conditions. *Indralupta* is equated with alopecia areata by modern means. Research works on *Indralupta* by using drugs like *Gunja*, *Dattura* etc. have been conducted, but no work has been conducted by using the drug regimen *Chirabilwa lepa* following *Prachanna*. Hence the topic of research is selected. In this comparative study, 60 patients were taken having *Indralupta* and divided into two groups. Group A treated with *Prachanna* followed by *Chirabilwa lepa* and Group B treated with *Prachanna* followed by Gunja *lepa*. At the end of the study it is seen that *Prachanna* followed by *Chirabilwa Lepa* has shown significant improvement than *Prachanna* followed by *Gunja Lepa*.

INTRODUCTION

Hair plays an important role in physical appearance of a person. So, each one is extra conscious about it and is in search of better remedy or their crowning glory. The scalp and hair diseases are of more importance nowadays due to the cosmetic value in society.

Ayurveda has described hair problems under *Kshudra roga, Kapala roga* as *Indralupta, Khalithya, Palithya* etc. *Indralupta* is one among the *Kapala roga*[1] according to *Vagbhata* and *Kshudra roga* [2] according to *Susrutha. Acharya Charaka* mentions that *Tejas* by involving *Vatadi dosha* when reaches the scalp, it results in *Khalithya* [3] *(Indralupta).*

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According to *Acharya Susrutha Pitta* along with *Vata* by involving the roots of hair (*Romakoopa)* causes fall of hair and thereafter *Sleshma* along with *Shonitha* obstruct the channel of *Romakoopa* leading to the stoppage of the regeneration of hair and this condition is known as *Indralupta, Khalithya, Ruhya.* Thus *Vata, Pitta, Kapha dosha* and *Rakta dushya* are the main internal causative factors of *Indralupta.*

Depending on the symptoms in contemporary science we can probably correlate to alopecia. There are many types of alopecia depending upon the pattern of hair loss. Alopecia areata is a frequently encountered condition characterized by patchy hair loss [4]. Alopecia areata is a common chronic tissue specific auto immune disease, usually in hair loss that affect upto 2% of the general population. Multiple genetic and environmental factors contribute to the pathogenesis of alopecia areata. There are several clinical treatments for alopecia areata. The available treatment for alopecia areata, such as corticosteroids and other immunomodulators, minoxidil and contact

immunotherapy which are of limited efficacy with a high risk of adverse effects.

Ayurveda suggests surgical procedures like *Prachanna, Lekhana* and parasurgical procedure like *Jaloukavacharana* in *Indralupta.* Numerous substances for external application, including herbal, mineral, and single-drug formulations, are described in the literature. many preventive and curative treatment measures like *Nasya, Rasayana, Moordha taila (Abhyanga, Pichu, Shirodhara, Shirobasti), Pathya sevana, Apathya nisheda* also mentioned. [5]

This study is an attempt to evaluate the efficacy of the *Chirabilwa lepa* and *Gunja lepa* after *Prachanna* on the affected part. But there is no empirical data related to its efficacy is available and hence a clinical trial with documentation is essential for evaluation of its therapeutic value.

MATERIALS AND METHODS

The study was undertaken after receiving approval from IEC committee. Patients were obtained from OPD and IPD of *Shalyatantra* PG Department, Karnataka Ayurveda Medical College and Hospital Mangaluru. 30 patients were managed with *Prachanna* followed by application of *Chirabilwa lepa* is applied which was kept as the study group (Group A) *Prachanna* followed by application of *Gunja lepa* was done on another 30 patients, kept as control group for the study (Group B). The patients were treated by *Prachanna* followed by *Chirabilwa lepa/Gunja lepa* on every week for a period of 8 weeks. Effected part should be cleaned with spirit. *Prachanna* was done over the affected area with the help of insulin syringe, at a distance of 3 millimeters. Just after *Prachanna,* scalp was cleaned with the help of lukewarm water then *Chirabilwa lepa/Gunja lepa* was applied. Later it is removed just before it got dried up completely. Assessment was done based on butter paper analysis and by using hair analyzer machine.

After completing eight sittings of procedure, patients were followed up for an additional four months to assess symptom status and recurrence.

Objectives of the Study

1. To evaluate the effect of *Prachanna* followed by *Chirabilwa lepa* in the management of *Indralupta*.
2. To evaluate the effect of *Prachanna* followed by *Gunja lepa* in the management of *Indralupta*.
3. Comparative effect of both *Prachanna* followed by *Gunja* and *Chirabilwa* in the management of *Indralupta*.

Diagnostic Criteria

Diagnosis will be done according to the signs and symptoms as per Ayurvedic classics and cotemporary medical text books and modern reference books.

- The patients with complaints of *Ekadeshiya Keshapata* (patchy hair loss)
- Non-scarring

INCLUSION CRITERIA

- Patients in the age group of 20-40 either sex.
- Patients having the clinical features of patchy hair loss occurring anywhere on the scalp.
- Patients with lesion of duration less than one year.

Exclusion Criteria

- Patients with alopecia Universalis and with other forms of alopecia.
- Patients with scarring alopecia.
- Patients with immunological disorders.
- Patients suffering from any systemic disorders which may affect the study.

Procedure

60 *Indralupta* patients were selected and divided into two groups namely Group A & B.

Group A

- Group A is administering treatment with *Prachanna*, followed by application of *Chirabilwa lepa*, which is a paste made from fresh *Chirabilwa* leaves mixed with water.
- Clean the area using spirit, perform *Prachanna* with an insulin syringe, apply the *Lepa*, and remove the *Lepa* before it dries completely using *Takra*.
- Repeat this procedure every 7 days for a total of 8 weeks.

Group B

- Group B is providing treatment with *Prachanna,* followed by the application of *Gunja lepa*, which consists of a paste made from *Shoditha Gunja* seeds powder mixed with water.
- Disinfect the area using spirit, conduct *Prachanna* with an insulin syringe, apply the *Lepa*, and remove the *Lepa* before it fully dries using *Takra*.
- Repeat this process every 7 days for a duration of 8 weeks.

OBSERVATIONS

Assessment will be made on the basis of subjective and clinical objective parameters both before and after the treatment as per a clinical proforma.

Subjective Parameters

- *Kesha Patan*
- *Kesha Tanutwa*
- *Kesha Rukshata*
- *Shiro kandu*
- *Kesha Sanjanana*

Objective Criteria

- Number of Patchy Lesion count in number.
- Size of the lesion in milimeters (mm).
- Butter paper analysis before and after treatment.
- Hair analysis by using Hair Analyzer machine

Statistical Analysis

Assessment Chart

Objective Parameter

Table 1: Grading according to size of lesion

Grade	Score	Lesion size (circumference -cm)
0	0	No lesion
+	1	<2 cm
++	2	2-4 cm
+++	3	4.1-6 cm
++++	4	>6 cm

Subjective Parameters

Table 2: Grading for *Kesha patina* (hair fall)

Grade	Score	Feature
0	0	No hair fall
+	1	Hair fall only during washing/combing (<50 strands /day)
++	2	Moderate hair fall (50-100 strands/day)
+++	3	Excessive hair fall (>100 strands/day, visible on pillow /clothes)
++++	4	Severe hair fall with obvious thinning or patchy loss

Table 3: Grading for *Kesha Tanutwa* (Thinning of hair)

Grade	Score	Feature
0	0	Normal hair thickness and density.
+	1	Mild thinning, slightly reduced volume.
++	2	Moderate thinning, scalp visible on close observation.
+++	3	Marked thinning, scalp clearly visible.
++++	4	Severe thinning with near bald appearance.

Table 4: Grading for *Shiro rukshatha* (Dryness of scalp)

Grade	Score	Feature
0	0	Noraml scalp moisture
+	1	Mild dryness,no discomfort
++	2	Moderate dryness with continuous scaling
+++	3	Severe dryness with continuous scaling
++++	4	Extremely dry scalp with cracks or rough texture

Table 5: Grading for *Shiro Kandu* (itching on scalp)

Grade	Score	Feature
0	0	No itching
+	1	Mild itching, occasional.
++	2	Moderate itching causing urge to scratch.
+++	3	Severe itching causing urge to scratch.
++++	4	Very severe itching disturbing sleep or daily activities.

Group A

Effect on Size of Lesions: As shown below in the table, before treatment the mean score of the size of the lesion was 3.2 which was reduced to 1.1 after the 56 days of treatment. Thus 65.6% reduction in the size of lesions provided by the treatment was statistically significant. (p<0.001).

Objective

Table 6: The Result of follow up in *Prachanna* with *Chirabilwa lepa* (Group A)

Lesion Size	Mean Score			% of Reduction
	BT	AT		
Group A	3.2	Day 7	3	6.2%
		Day 14	2.9	9.3%
		Day 21	2.5	21.8%
		Day 28	2.3	28.1%
		Day 35	2.1	34.3%
		Day 42	1.9	40.6%
		Day 49	1.6	50%
		Day 56	1.1	65.6%

Subjective

Table 7: The Result of follow up in *Prachanna* with *Chirabilwa lepa* (Group A)

Subjective Parameters (Group B)	Mean Score					% of Reduction
	BT	Day 14	Day 28	Day 42	Day 56	
Kesha patan	4	2.8	2.7	1.6	0.9	77.5%
Kesha Tanutwa	4	3.2	3.0	2.7	2.0	50%
Shiro Rukshata	3.2	3.0	2.7	2.4	1.5	53.1%
Shiro Kandu	3.4	3.0	2.5	1.9	1.1	67.6%

The data shows a consistent decrease in mean scores over time for all parameters, indicating improvement. Follow up study showed that the result sustained after treatments.

Group B

Effect on Size of the Lesions: As shown below in the table, before treatment the mean score of the size of the lesions was 3.1 which was reduced to 1.8 after the 56 days of treatment. Thus 41.9% reduction in the size of lesions provided by the treatment was statistically significant (P<0.001).

Objective

Table 8: The Result of follow up in *Prachanna* with *Gunja Lepa* (Group B)

Lesion Size	Mean Score			% of Reduction
	BT	AT		
Group A	3.1	Day 7	2.9	6.4%
		Day 14	2.7	12.9%
		Day 21	2.6	16.1%
		Day 28	2.4	22.5%
		Day 35	2.3	25.8 %
		Day 42	2.2	29%
		Day 49	1.9	38.7%
		Day 56	1.8	41.9%

Subjective

Table 9: The Result of follow up in *Prachanna* with *Chirabilwa lepa* (Group B)

Subjective Parameters (Group B)	Mean Score					% of Reduction
	BT	Day 14	Day 28	Day 42	Day 56	
Kesha patan	4	2.9	2.8	1.7	1.1	72%
Kesha Tanutwa	4	3.3	3.1	2.6	2.1	47%
Shiro Rukshata	3.6	3.5	2.9	2.4	1.6	55.5%
Shiro Kandu	3	2.9	2.8	2.0	1.1	63%

The data shows a consistent decrease in mean scores over time for all parameters, indicating improvement.

Follow up study showed that the result sustained after treatments

Comparative Results of Group A & Group B

Student independent sample t-test

Comparing two groups (Group A and Group B) across multiple time points (from baseline/first day to the 56th day).

Group Descriptives

Group A and Group B both had around 30 participants each. Mean, median, standard deviation, standard error were reported for each day.

Table 10: The Overall Effect of Treatment on size of the lesions in both groups

Parameters	Group	Mean Improvement	S.D	S.E	Difference between mean improvement	't' value	p value	Remarks
Lesion Size	A	2.10	0.71	0.13	0.70	4.12	<0.001	Significant
	B	0.70	0.62	0.11				

- Mean improvement in Group A is significantly higher than Group B
- Since p< 0.001, the difference is highly statistically significant.
- This indicates that Group A intervention is more effective than Group B in producing overall improvement from baseline to the end of treatment.

DISCUSSION

Indralupta is a disease affecting *Kapala* (scalp). It is characterized by loss of hair with poor replacement. According to Ayurvedic scholars, when *Pitta* combines with *Vata*, it becomes localized in the *Romakoopa* (hair follicles), leading to hair fall. Subsequently, *Kapha dosha* associated with *Rakta* causes obstruction at the hair roots, thereby inhibiting hair regrowth.[6]

The clinical features of *Indralupta* described in classical Ayurvedic texts closely correspond with the signs and symptoms of alopecia areata as recognized in modern medical science. Hence *Indralupta* can be equated to alopecia areata. Alopecia areata is an autoimmune disorder in which T-lymphocytes target the hair follicles. Its development is influenced by both genetic predisposition and environmental factors, with familial occurrence reported in approximately 10%-50% of affected individuals.

The *Samprapti* of *Indralupta* is described as occurring in two distinct stages. In the initial phase, aggravated *Vata* and *Pitta* result in excessive hair loss, during which early intervention with *Vatapitta-hara* and *Rasayana chikitsa* may be beneficial. As the condition advances, the involvement of *Kapha* and *Rakta* leads to obstruction at the hair follicles, thereby inhibiting hair regrowth. Commonly patients seek medical care during this stage. The therapeutic approach in the second stage focuses on alleviating *Srotorodha* through *Kapha–Rakta shodhana*. However, localized interventions to clear *Romakoopa rodha* are essential for effective *Samprapti vighatana* at this stage. Classical Ayurvedic texts primarily recommend *Raktamokshana* and *Lepana* as the main therapeutic procedures in the management of *Indralupta*. In cases of *Ekadeshastha Rakthadusti, Prachanna*[7] is considered as an appropriate therapeutic modality.

In this procedure, an insulin syringe is used to create deep pricks over the affected areas and superficial pricks across the scalp to stimulate hair follicles, enhance local circulation, and prevent the development of new patches over other areas of scalp, which contributed to alleviating related issues such as *Kesha patan* (hair fall), *Shiro kandu* (itching on scalp),

Kesha rukshatha (dryness of hair) etc and helps in *Keshā sañjanana* (hair regeneration) also. *Ashtanga Hridaya* describes the use of *Kurcha* as a therapeutic measure in the management of hair loss[8] *Lepana* is a *Bahiparimarjana* chikitsa[9]. When medicines are applied externally in the form of *Lepana*, their absorption is facilitated by *Brajaka Agni* present in the skin. When applied over the scalp, *Lepana* exerts its action through its *Rasa, Guna, Veerya,* and *Vipaka*, becoming absorbed into the hair follicles. This facilitates the digestion of *Ama*, pacifies the residual *Doshas*, and promotes the opening of follicular pores. By draining the vitiated blood from the diseased area, *Pracchanna* aids in creating favourable conditions for quicker absorption of *Lepa* drugs.

Chirabilwa[10] possesses *Ushna veerya, Tikta, Kashaya rasa, Laghu ruksha guna, Katu Vipaka Kapha pitta shamana* and *Lekhaneeya* properties, in *Indralupta,* it aids in *Samprapti vighatana.*

Gunja possesses[11] *Ushna veerya, Kashaya* and *Tikta rasa,* and *Katu vipaka;* it pacifies *Vata* and *Kapha doshas* and is also recognized for its *Keshya* (hair-promoting) properties.

CONCLUSION

After follow up for both groups showed better improvement which proves that the result was sustained in both groups. Comparative analysis of the outcomes in both groups demonstrated that *Pracchanna* combined with *Chirabilwa lepa* was more effective than *Pracchanna* with *Gunja lepa* in alleviating the signs and symptoms of *Indralupta*. Based on the findings of this study, it can be concluded that *Chirabilwa lepa* used alongside *Pracchanna* yields superior therapeutic results compared to *Gunja lepa* with *Pracchanna.* Since the sample size is small, it further needs attention towards elaborate and wide range of studies to prove the efficacy of the drugs.

REFERENCES

1. Murthy K.R. Srikantha. Ashtanga Hrdayam. 5th ed. vol. 3. Varanasi: Chaukambha Krishnadas Academy; 2003. p.222.
2. Murthy K.R. Srikantha. Susrutha Samhitha. reprinted ed. vol. 1. Varanasi: Chaukambha orientalia; 2016. p.549, 550.
3. Sharma P.V. Caraka Samhita. vol. 2. Varanasi: Chaukamba Orientalia; 2014. p.438, 439.
4. Punger W, Shapiro R. Hair Transplantation. 5th ed. New York: Informa Health Care; 2011. p.53
5. Murthy K.R. Srikantha. Susrutha Samhitha. reprinted ed. vol. 2. Varanasi: Chaukambha orientalia; 2016. p.195.
6. Murthy K.R. Srikantha. Susrutha Samhitha. reprinted ed. vol. 2. Varanasi: Chaukambha orientalia; 2016. p.195.
7. Murthy K.R. Srikantha. Susrutha Samhitha. reprinted ed. vol. 1. Varanasi: Chaukambha orientalia; 2016. p.124.
8. Murthy K.R. Srikantha. Ashtanga Hrdayam. 5th ed. vol. 3. Varanasi: Chaukambha Krishnadas Academy; 2003. p.301.
9. Murthy K.R. Srikantha. Susrutha Samhitha. reprinted ed. vol. 1. Varanasi: Chaukambha orientalia; 2016. p.129.
10. Bhat KG. Flora of Udupi. Udupi: Indian Naturalist, Inchara; 2003. p. 587.
11. Gogte VM. Ayurvedic Pharmacology and Therapeutic Uses of Medicinal Plants. Reprint ed. Varanasi: Chaukhambha Publications; 2012. p.600.

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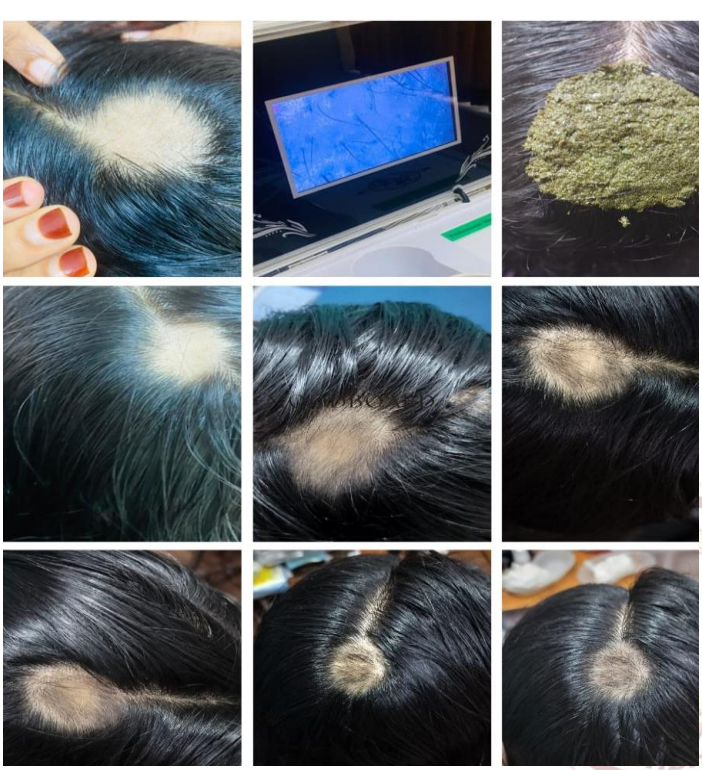
***Chirabilwa* Leaf**

***Chirabilwa* Leaf**

Chirabilwa Kalka



Case 1, Case 2: Treated with *Prachanna* followed by *Chirabilwa lepa*

Case 3, Case 4: Treated with *Prachanna* followed by *Chirabilwa lepa*

Case 5, Case 6: Treated with *Prachanna* followed by *Chirabilwa lepa*