

COMPARATIVE CLINICAL STUDY ON JALAUKA AVCHARANA AND MANSYADI LEPA IN THE MANAGEMENT OF KHALITYA: RANDOMIZED CLINICAL STUDY

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ABSTRACT

'Hairs of the scalp' an additive factor of personality. Beautiful, long and attractive hairs of the scalp are a major factor of our appearance and are a part of physical attraction. Hair loss is a major problem these days. In the today's life style, there is a race for cosmetics, western culture, indifferent dietary habits, has made the hairs either grey at prematurity or to fall down. A different type of shampoos, soaps and hair colour creams in the name of beauty products has made the condition worse. Present clinical study entitled as comparative clinical study on jalauka avcharana and lepa in the management of Khalitya was completed with a clinical trial. During the trial comparative analyses of both the group is having significant result in all parameters, comparatively superior than Mansyadi Lepa. But the Lepa also showing a significant result in the management of the Shirokandu and Dandruff, but not having good result in hairfall parameter. So the

Jalauka Avcharana is superior than the Mansyadi Lepa.

KEYWORDS: Alopecia (Hairfall), *Khalitya*, *Mansyadi Lepa*, *Jalaukavcharana*.

INTRODUCTION

Khalitya means loss of hairs or termed as hairfall. *Acharya Sushruta* coined term under the *Kushudra Roga* but *Acharya Vagbhatta* classified in *Shiroroga*. *Khalitya* is primarily a Pitta dominant Tridoshjanya Vyadhi ie. *Vata*, *Pitta*, *Kapha* and *Rakta dosha*., *Kapha*, with *Rakta dosha*. Vitiated Pitta seated into deep roots of hairs and cause weakening of hairs. Vitiated along with that Kapha and Rakta dosha obstruct the hair roots (Romakupa) which ceases further growth of hair.

According to modern medicine, it is termed as Alopecia or baldness which refers to partial or complete loss of hair especially from the roots. The incidence of hairfall continuously increasing day by day not even in adult age group but in younger age group of population. The reason behind this, changing lifestyle, unhealthy dietary habits, disturbed sleep patterns, systemic disorders, medication toxicity and last stressful life also contribute to it.

In Ayurveda, *Bahya* and *Abhyantar Chikitsa* was described in *Khalitya*. Most of the research studies conducted on *Nasya*, *Raktmokshan* and external application of *Lepa* along with *Keshya*, *Rasayana* drugs in the management of *Khalitya Roga*. In the present study, a comparative outcome revealed out that both interventions have effective approach in *Khalitya* management but *Jalauka Avcharna* is comparatively more effective than local application of *Mansyadi Lepa* in improving hair growth, reducing *Shirokandu* and Dandruff. This is the first study in our knowledge in which effectiveness of procedural interventions are compared. In future, there is further scope to work in this direction for better outcome.

MATERIAL AND METHODS

A clinical study was carried out at Govt. Auto. Ayurveda college, Rewa (M.P.). The Institutional Ethical Committee granted ethical clearance for the study on starting the trial. This clinical trial was prospectively registered in the Clinical Trials Registry of India (CTRI). The trial was started after obtaining a signed consent form from the participants.

METHODOLOGY

Trial design

Randomized clinical trial, an interventional study, open label, double arm without cross over.

AIM AND OBJECTIVE

To observe the clinical effect of *Jalauka avcharana* in the management of *Khalitya*.

To observe the clinical effect of *Mansyadi lepa* in the management of *Khalitya*.

To study *Khalitya* along with its etiopathogenesis.

Inclusion criteria

Patient of either sex in age group 20-40 years will be included.

Patients have cardinal features of *Khalitya* will be included.

Exclusion criteria

Patients below the age 20years and above 40 years will be excluded. Patients who have severe dermatological disease of scalp. Patients who have any systemic diseases DM2, HTN. Patients who have total hair loss on scalp. Patients who under gone chemotherapy will be excluded.

Intervention

In group A *Jaluakavcharana* (Leech Therapy) was introduced once in week & internal application of *Triphala churna* 5gm bis- a- day with leukwarm water.

In group B *Mansyadi Lepa* was apllied once in a day & *Triphala churna* 5gm bis-a-day with lekwarm water.

Duration of intervention is 45 days.

Sample size

In group A total number of patients enrolled is 50 and same in group B.

Assessment criteria

S. No.	Grade	Total effect of therapy
1	Complete relief	100%
2	Marked relief	More than 75%
3	Moderately relief	50-75 %
4	Mild relief	25-50 %
5	No relief	Marginal improvement

OBSERVATION AND RESULTS

Effect of therapy on subjective and objective parameters such as Shiro Kandu, Dandruff and Hairfall were assessed and obtained results were statistically analyzed by applying ‘Student T test’.

Table 1: Showing effect of therapy on different parameter in group A.

Symptoms	BT	AT	%	Relief
<i>Shirokandu</i>	2.46	0.66	73.17%	Moderate relief
Dandruff	2.30	0.66	71.30%	Moderate relief
Hairfall	3.40	0.86	74.70%	Moderate relief

Table 2: Showing effect of therapy on different parameter in group B.

Symptoms	BT	AT	%	Relief
<i>Shirokandu</i>	2.52	0.96	61.90%	Moderate relief

Dandruff	2.64	0.80	69.69%	Moderate relief
Hairfall	3.64	2.26	37.91%	Mild relief

Table 3: Showing the comparative efficacy of the therapies in Group A and Group B by using unpaired T test.

Parameter of Assessment	Group A		Group B		t-value	p-value	Result
	Mean	S.D.	Mean	S.D.			
<i>Shirokandu</i>	1.80	0.638	1.56	0.64	0.064	>0.10	NS
Dandruff	1.64	0.662	1.84	0.81	1.344	>0.10	NS
Hairfall	2.54	0.706	1.38	0.85	7.400	<0.001	Sig.

Table 4: Showing total response of therapies in Group A and Group B.

Response of therapy	Group A		Group B	
	No. of subjects	%	No. of subjects	%
Marked >75%	26	52%	4	8%
Moderate 51-75%	15	30%	24	48%
Mild 26-50%	9	18%	18	36%
No response <25%	0	-	4	8%

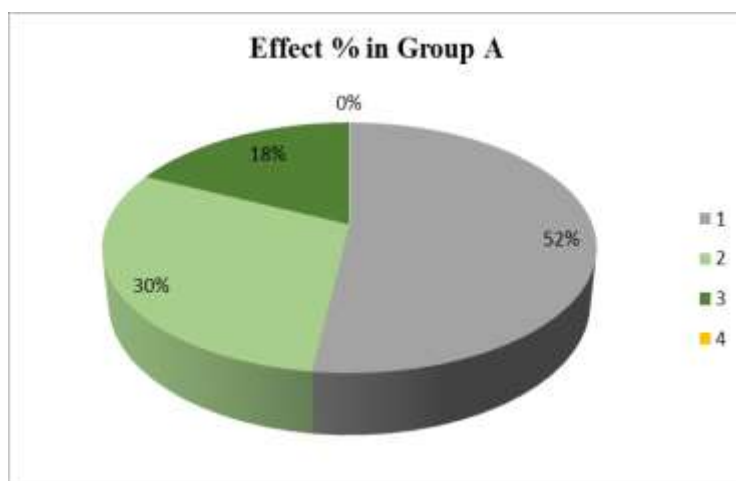


Fig. 1

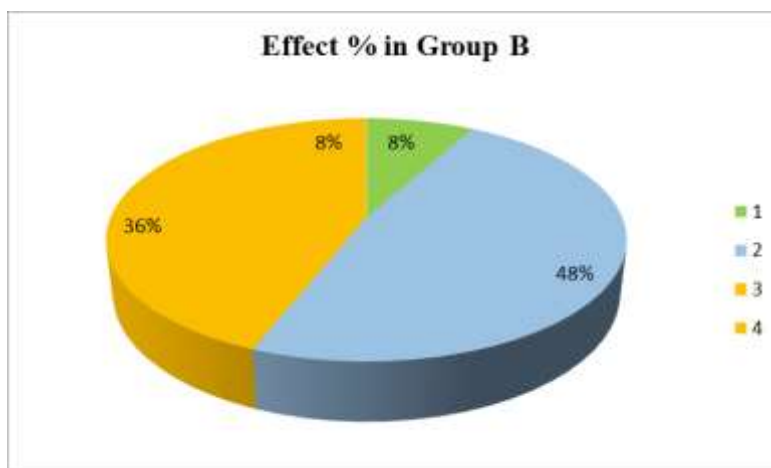


Fig. 2

DISCUSSION

‘Hairs of the scalp’ an additive factor of personality. Beautiful, long and attractive hairs of the scalp are a major factor of our appearance and are a part of physical attraction. Hair loss is a major problem these days. In the today’s life style, there is a race of cosmetics, western culture, indifferent dietary habits, has made the hairs either grey at prematurity or to fall down. A different types of chemicals, hair colours, shampoos, soaps and gels in the name of beauty products has made the condition worse.

In Ayurvedic text, there are 3 terms used to describe the symptoms of Hairfall. *Khalitya* is the synonym of *Indralupta*, and *Rujya*. *Khalitya* is a long running process of hairfall due to vitiation of Vata, Pitta, Kapha and Rakta dosha.

In modern science, Alopecia may be correlated with *Khalitya*. There are different types of Alopecia but most common is Alopecia areata where hair is lost from an particular area. When entire hair is lost it is known as Alopecia totalis.

In Shalya Tantra, *Raktmokshan* is one of the parasurgical procedure described by *Sushruta*, *Jalaukaavacharana* comes under the *Ashastra krita Raktmokshan* mainly applied in diseases occurred from vitiated *Pitta dosha*.

In the above clinical study, *Mansyadi Lepa* is intervened for *Khalitya* management. *Lepa* is finest form through which drug easily penetrates the pores of skin (*Romakupa*). *Mansyadi lepa* described by Acharya Vagbhatta for *Kesha vardhana*.

Triphala Churna is known for *Tridoshashamak* property hence act as *Rasayana*.

So, in the present study patients who have symptoms of *Khalitya* is subjected to *Jalauka avcharana* and assessed their effect. The result is compared with *Mansyadi lepa*.

After observation, results were statistically analyzed, hairfall in Group A showed a significant result after post procedural period i.e. 75% relief was observed with statistically significant *p-value* <0.0001. Similarly, Group B show highly significant result in hairfall with *p-value* <0.001. After treatment, good response of therapies were observed in both groups regarding dandruff with statistically significant *p-value* <0.001. Regarding Shirokandu in Group A 73.1% improvement observed with significant *p-value* <0.001 whereas in Group B 61.9% improvement was observed with significant *p-value* <0.001.

CONCLUSION

After a thorough discussion on various observations in the present comparative clinical study, following observations were drawn:

In the present study 100 subjects were selected which is a satisfactory sample size in a short term research work. All subjects cooperated during research work. Observation of the present study reveals that the comparative analyses of both the groups are having significant results in all parameters, comparatively superior than *Mansyadi Lepa*. But the *Lepa* also showing a significant result in the management of the Shirokandu and Dandruff, but not having good results in hairfall parameter. So the *Jalauka Avcharana* is superior than the *Mansyadi Lepa*. Alternate hypothesis is accepted.

Conflict of interest

No.

Consent

All subjects give consent before enrollment.

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