



A Comparative Clinical Study Of Khakhasa Beeja Lepa And Priyala Beejadi Lepa In The Management Of Darunaka W.S.R.To Pityriasis Capitis

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ABSTRACT

Darunaka is explained under Kshudra rogas by Acharya Sushruta and Kapalagata rogas by Acharya Vagbhata. It is manifested due to vitiation of Kapha and Vata, Pitta and Rakta and leading to lakshanas such as: Kandu (itching), Keshachyuti (hair fall), Swaapa (loss of sensation), Rookshata (dryness), and Twak sphutana (cracking). In modern medicine the treatment is available for this condition but that is so expensive which gives path for more efficacious management through Ayurveda. Ayurveda classics majorly emphasizes the bahya lepa upachara as a line of treatment in Darunaka. However many remedies are described for Darunaka. Khakhasa beeja lepa is one of them. Khakhasa beeja lepa is easy for external application and easily available in the market. Hence, in the present study comparative clinical study for assessment of the effect of Khakhasa beeja lepa and Priyala beejadi lepa in the management of Darunaka was planned. 40 patients suffering from Darunaka were selected and divided into 2 groups, 20 patients in each group. In Group A- 20 patients were applied with Khakhasa beeja lepa for 30 days and in Group B- 20 patients were applied with Priyala beejadi lepa for 30 days. Kandu, Keshachyuti, Swapa, Keshabhoomi sphutana, Rukshatha, were the assessment parameters. Group A (treated with Khakhasa beeja lepa)

demonstrated a significant effect on all parameters of Darunaka. Group B (treated with Priyala beejadi lepa) also showed a significant effect on all parameters of Darunaka. The average percentage improvement in Group B was 51.04%, which is greater than the 43.40% improvement observed in Group A. The treatment with Priyala beejadi lepa (Group B) is more effective than Khakhasa beeja lepa (Group A) for managing Darunaka.

Key words: Priyala beejadi lepa, Khakhasa beeja lepa, Darunaka

INTRODUCTION

Darunaka is explained under Kshudra rogas by Acharya Sushruta¹ and Kapalagata rogas by Acharya Vagbhata². It is manifested due to vitiation of Kapha and Vata, Pitta and Rakta and leading to lakshanas such as: Kandu (itching), Keshachyuti (hair fall), Swaapa (loss of sensation), Rookshata (dryness), and Twak sphutana (cracking).

Pityriasis capitis is commonly known as Dandruff. It is essentially caused by inadequate cleaning of the scalp³. Dandruff is an irritative disease of the scalp, in which shedding of dead tissue from the scalp with itching sensation is the cardinal feature⁴. The scaly scalp may look unhygienic and untidy. Itching due to Dandruff also causes the great embarrassment to the sufferer in the public. Dandruff causes more social and psychological problems than medical ones⁵.

It is moreover super flaking, as it leads to significant structural changes in stratum corneum and inflammatory biomarkers. It has been well established that Keratinocytes play a key role in the expression and generation of immunological reactions during dandruff formation. Various intrinsic and extrinsic factors, such as Malassezia yeast, host epidermal conditions, sebaceous secretion, and abnormal immune responses, are found to contribute to the pathogenesis⁶. A study even illustrates oxidative stress as an etiological element relevant to the dandruff condition⁷. It is a matter of concern due to its recurring nature.

In modern medicine the treatment is available for this condition but that is so expensive which gives path for more efficacious management through Ayurveda. Ayurveda classics majorly emphasizes the bahya lepa upachara as a line of treatment in Darunaka. However many remedies are described for Darunaka. Khakhasa beeja lepa is one of them.. Khakhasa beeja lepa is easy for external application and easily available in the market.. Hence, in the present study comparative clinical study for assessment of the effect of Khakhasa beeja lepa and Priyala beejadi lepa in the management of Darunaka was planned.

OBJECTIVES

1. To study the efficacy of Khakhasa beeja lepa in Darunaka.
2. To study the efficacy of Priyala beejadi lepa in Darunaka.
3. To compare the efficacy of Khakhasa beeja lepa and Priyala beejadi lepa in the management of Darunaka.

MATERIALS AND METHODS

In the present study, the main objective is to A Comparative Clinical Study Of Khakhasa Beeja Lep And Priyala Beejadi Lepa In The Management Of Pityriasis Capitis. The efficacy was determined by finding out the difference between the baseline data of the parameters to the post medication data.

Study design: A Simple comparative clinical Prospective study and sampling technique is purposive or deliberate.

Sample size and grouping: 40 patients suffering from Darunaka were selected and divided into 2 groups, 20 patients in each group.

Group A- 20 patients were applied with Khakhasa beeja lepa for 30 days

Group B- 20 patients were applied with Priyala beejadi lepa for 30 days

Methods of Collection of Data

Inclusion Criteria

- Presence of clinical features of kandu, keshachyuti, keshabhumi sphutana, twak rukshata etc.
- Age group between 16 to 70 years
- Patients irrespective of sex, religion, Socio –economic status and locality.

Exclusion Criteria

- Patients who give the history of Scalp psoriasis, Immuno compromised systemic diseases and also skin diseases which includes scalp were excluded from the study.
- Pregnant and lactating mother.

Diagnostic Criteria

Diagnosis was established by clinical examination of signs and Symptoms of Darunaka.

INTERVENTION

Consent was taken from the patient. Shiromundana was done.

Group A: Khakhasa beeja lepa was applied on the scalp and then it was washed with lukewarm water, before it gets dried. It was applied once in three days for 1 month.

Group B: Priyala beejadi lepa was applied on the scalp and then washed with lukewarm water, before it gets dried. It was applied once in three days for 1 month.

DOSAGE – As Required

DURATION – One Month

FOLLOW UP- Follow up every 7 days for a period of 1 month

The Materials Used for the Study:

Khakhasa beeja lepa: Khakhasa beeja is soaked in Godugdha for 2 hours, and then made into a fine paste by adding godugdha as per requirement.

Priyala beejadi lepa: Priyala beeja, Yastimadhu, Kusta, Masha and Saindhava lavana was taken equal quantity, made into fine powder and lepa was prepared by adding required quantity of Madhu.

Assessment Criteria

The subjective and objective parameters of base line data to post medication were compared for assessment of the results. All the result was analysed statistically for 'p' value using paired - t test and Anova

PARAMETERS OF THE STUDY:**Subjective Parameters:****Kandu**

Grading	Observation
0	Kandu Rahitha
1	Alpa Kandu
2	Madhyama Kandu
3	Teevra Kandu

Keshachyuti

Grading	Observation
0	Chyuti Rahitha
1	Alpa chyuti
2	Madhyama chyuti
3	Satata evam teevra chyuti

Swapa

Grading	Observation
0	Swapa Rahitha
1	Alpa Swapa
2	Madyama Swapa
3	Teevra Swapa

Objective criteria Keshabhoomi sphutana

Grading	Observation
0	No cracking
1	Cracking is limited to 5-10 cm area
2	Cracking is limited to 10-20 cm area
3	Cracking is limited to 10-20 cm area

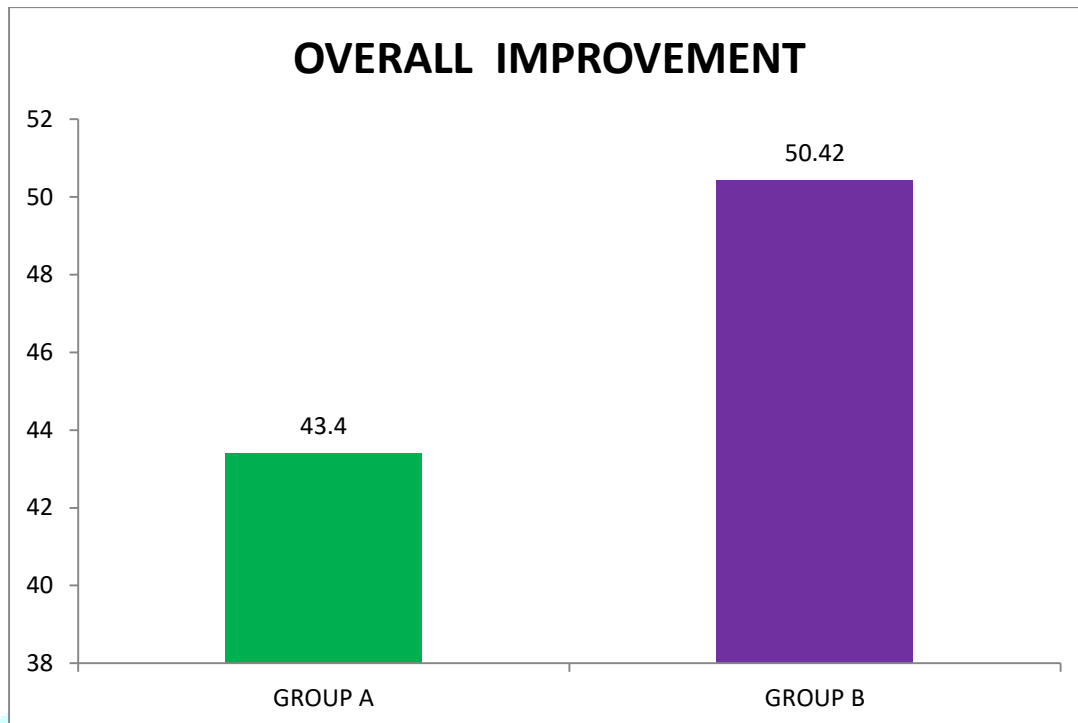
Rukshatha

Grading	Observation
0	Rukshatha Rahitha
1	Alpa Rukshata
2	Madhyama Rukshata
3	Teevra Rukshata

RESULTS**Table Showing Effect of therapy on Subjective & Objective Parameter**

PARAMETER	GROUP	Mean	% of Improv.	T-Value	P-Value	Remarks
Kandu	A	0.8	35.5	1.14	>0.05	NS
	B	0.95	40.4			
Keshachyuti	A	0.65	44.82	1.92	>0.05	NS
	B	1	52.63			
Swapa	A	0.95	45.23	0.71	>0.05	NS
	B	1.1	50			
Keshabhoomi sphutana	A	0.9	48.64	0.90	>0.05	NS
	B	1.05	60			
Rukshatha	A	0.9	42.85	1.67	>0.05	NS
	B	1.2	52.17			

Graph-Overall effect of the Therapies



For comparison between Group A and Group B, Un paired t test is used. From above table we can observe that P-Values for all parameters are more than 0.05. Hence we conclude that statistically there is no significant difference between Group A and Group B in the management of Darunaka.

Further we can observe that Average percentage of improvement of Group B is 51.04% which is greater than Average percentage of improvement of Group A- 43.40%. Hence we conclude that effect observed in Group B is more than Group A.

DISCUSSION

MODE OF ACTION

PROBABLE MODE OF ACTION OF LEPA

KHAKHASA BEEJA LEPA:

Khakasa beeja with its laghu, sookshma, vyavayi guna and ushna virya and godugdha with madhur ras, madhur vipak and snigdha properties cause vata shamana. Due to this, it helps to reduce scaling and dryness whereas, with its tikta kashaya ras, katu vipak, as well as grahi and shoshana and shoshana karma, it does kapha pitta shaman that helps in reducing itching, hair fall and pitika. Besides, both have krumighna property and the karmukata of khakasa beeja is balya. This action strengthens the kesha bhumi as well as kesha moola. Godugdha gives snigdhatva to the scalp which helps to reduce rukshata. The combination of all these drugs helps to break down the pathology of the disease. According to modern science, poppy seed (khakasa beeja) has antimicrobial, antioxidant, antimicrobial, anti-helmintic, healing and analgesic action, and also

strengthens the immunity. The cow milk gives smoothness, hence reduces dryness. Because of these properties, the encouraging results were obtained in Darunaka (dandruff) with Khakasa beeja lepa

PRIYALADI LEPA:

Priyaladi lepa formulation includes six ingredients and procurement of these raw drugs is effortless due to easy availability. Pharmaceutical processing necessitates only basic equipment and processing technique. From the pharmaceutical point of view, a trial drug is a simple cost effective formulation. The presence of honey makes it thick and sticky. Hence, to improve the ease of application neutral agent, water was allowed to be added to maintain the formulation without any change at the base level.

Subjects also highlighted the ease of application with the addition of sufficient water. It was instructed to be kept *in situ* for 45 min for providing sufficient time duration for local action over the scalp. *Priyaladi lepa* applied over the scalp does not get dried completely as honey is the content. The subjects neither described any inconveniences to keep the drug *in situ* nor any strain regarding hair wash. Hence, from the drug administration point of view, *Priyaladi lepa* is established as a convenient and acceptable treatment form in Pityriasis capitis.

Pharmacological appraisal of each ingredient of trial drug complements the broad antidandruff activity. *Buchanania latifolia* Roxb. and *Phaseolus mungo* Linn. show nourishing effects on the hair roots along with cleansing, antifungal, antimicrobial, anti-inflammatory, and antioxidant activity. *Glycyrrhiza glabra* Linn. is a potent antioxidant and hair growth initiator with anti-inflammatory and antipruritic properties. *Saussurea lappa* (Falc.) Lipsch. has a potent *Kushtagna* (antidermatosis) with antifungal and anti-inflammatory actions. Himalayan rock salt is known for its exfoliating and cleansing action along with regulation of sebum production. Honey has humectant and emollient properties. Centered upon these attributes, honey is established as a great hair and scalp moisturizer with anti inflammatory activity promoting cell repair and healing. Cumulative pharmacological activities of all these ingredients used in the formulation such as antidermatosis, antipruritic, emollient, exfoliating, antimicrobial, antifungal, anti-inflammatory and antioxidant activities contribute toward antidandruff action of the trial drug.

CONCLUSION

The following conclusions are drawn after logical interpretation of the results obtained in this clinical study, which are listed below:

- Under the broad spectrum heading of lepa kalpana, Sharangadhara Samhita has prescribed local paste applications for a common condition like Darunaka. However pharmaceutico-analytical standardization, in vivo and in vitro studies are essential to establish the clinical effectiveness of all lepa formulations.

- Ayurveda manuscripts have prescribed Khakhasa beeja lepa and Priyala beejadi lepa are among the topical applications for Darunaka.
- As the ingredients of the formulation are easily obtainable and pharmaceutical preparation is also found to be effortless, it is a cost-effective therapy for Pityriasis capitis.
- Group A with Khakhasa beeja lepa is having significant effect on all parameters of Darunaka (Pityriasis Capitis)
- Group B with Priyala beejadi lepa is having significant effect on all parameters of Darunaka (Pityriasis Capitis)
- Average percentage of improvement of Group B is 51.04% which is greater than Average percentage of improvement of Group A- 43.40%. Hence we conclude that effect observed in Group B Priyala beejadi lepa is more than Group A Khakhasa beeja lepa.

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