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Role of *Karanjbeejadi Lepa* in the Management of Alas (T. pedis)

Pal Guru Sharan*

*NAMCH Muzaffarpur, Bihar, India

Abstract

The disease Alas, mentioned by *Acharya* Sushruta can be correlated with Tinea pedis. *Karanj beejadi lepa* has been mentioned by Acharya Chakradatta for the management of Alas. This drug was found to be very effective clinically in the management of Alas and can be a better substitute of modern medicines for the treatment of Tinea pedis (Alas).

Keywords

Alas, Tinea pedis, Karanj beejadi Lepa, Tridosha shamak

Greentree Group

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INTRODUCTION

Alas[1] is a common problem all over the world. Despite great advances in dermatology and use of powerful corticosteroids and antihistamines, satisfactory treatment of the disease is not available. These drugs are either inadequately effective or associated with lots of side effects. Therefore the search for better, safe and effective drug is required.

The *doshas* involved in Alas are not mentioned in *Ayurvedic* texts. But according to classical descriptions of symptoms of the disease described in texts it is considered that the disease is *tridoshaj~~a~~a*. Therefore, the therapy which is *tridosha shamaka* mainly *kapha shamaka* will be effective in *Alas.* The drug *Karanj beejadi lepa* consisting of six drugs is *tridosha shamaka.*

The disease can be correlated with tinea pedis, a fungal infection of feet[2]. Tinea or ring–worm is a superficial fungal infection caused by dermatophytes. The dermatophytes are a group of fungi capable of colonizing keratinized tissues such as stratum corneum, nail and hair of animals. The taxonomic status of the dermatophytes has only three genera – Microsporum, Trichophyton and Epidermophyton[3]. There are four clinically accepted variants of T. Pedis, which may present as one variant or a combination of two or more variants –

i. Chronic intertriginous type
ii. Chronic papulo squamous type
iii. Vesiculo/vesiculobullous type
iv. Acute ulcerative type

i. *Chronic intertriginous type* – This is the most common type and is characterized by fissuring, scaling and maceration in the interdigital or subdigital areas. The lateral toe webs are the most common sites of infection. From here infection may spread to the sole of the foot but seldom involves the dorsum. Hyperhidrosis may be an underlying problem for a number of these patients and should be treated along with the dermatophytosis. The disease athlete's foot is not caused only by dermatophytes. Normal appearing toe webs have a skin flora consisting of staphylococcus, coryneforms and gram negative organism. Dermatophytes can also colonize normal toe webs frequently. The clinical picture of symptomatic athlete's foot results from the interaction of bacteria and dermatophytes. Overgrowth of bacteria alone or the presence of dermatophytes alone produces a relatively mild clinical picture that is short lived and relatively asymptomatic.

ii. *Chronic papulo squamous type:* This is usually bilateral and is characterized by minimal inflammation and a patchy or diffuse moccasin like scaling over the soles. T. rubrum and occasionally T. mentagrophytes are the usual causative organisms. In addition to the feet, the hands may be involved as well as multiple toenails. A common but puzzling presentation is the "one hand, two feet" presentation observed frequently with T. rubrum infections.

iii. *Vesicular/ vesiculobullous type*- This is usually caused by T. mentagrophytes var. interdigitale. Small vesicles or vesicopustules are seen near the instep and on the mid-anterior plantar surface. Usually there is associated scaling in these areas as well as in the toe webs. Larger bullae are more unusual but can be seen. This type of infection may become clinically quiescent during the cooler months of the year only to become symptomatic again in the summer.

iv. *Acute ulcerative type* - This is characterized by maceration, weeping denudation and ulceration of sizable areas of the sole of the foot. Obvious white hyperkeratosis and a pungent odour are characteristically present. This infection is often complicated by a secondary bacterial overgrowth.

AIMS AND OBJECTIVES

The present study has been planned to evaluate the role of *Karanj beejadi Lepa* in the management of *Alas.*

MATERIALS AND METHODS

For present study patients fulfilling the criteria for diagnosis were selected randomly from OPD of R. G. Govt. P. G. Ayurvedic Hospital Paprola, Himachal Pradesh, India. Detailed history was taken according to Case Report form prepared for the study, incorporating all the relevant points from both *Ayurvedic* and Modern views.

INCLUSION CRITERIA

- Patients willing to participate in the trial.
- Patients having signs and symptoms of *Alas* as explained by *Sushruta*[4]- Macerated interdigital area of feet, Pruritus, Burning sensation, Pain
- Patients of all age groups irrespective to sex, education, religion and socio-economic status were selected for the trial.

Exclusion criteria

- Patients unwilling to participate in the trial.

- Patients having any other systemic disorder like Tuberculosis, Diabetes mellitus.

DRUG DETAILS

It has been explained about this drug in Chakradatta 55/15 that lepa of karanj beeja, haldi, kasis, mulethi, gorochan and hartal with honey is beneficial in Alas[5]. Due to difficulty in availability of gorochan and hartal, these are excluded from the drug and due to antibiotic effect of neem beej, it is included in the drug. Powders of all ingredients were mixed in equal quantity and the drug was applied locally with honey.

LABORATORY INVESTIGATIONS

- Wood's lamp examination
- Skin fungal test (KOH test)

Estimation of Hb gm%, TLC, DLC, ESR, and Urine examination were carried out in the patient to rule out any organic or systemic diseases.

TRIAL GROUPS

Total 20 patients were selected for the present study that fulfilled the criteria of diagnosis and consented for the study. All selected patients were studied under single group and *Karanj beejadi lepa* was given to all the patients for local application 3-4 times a day according to lesion.

Mode of administration- Local application,

Dosage- 3-4 times according to lesion.,

Duration of trial- 30 days,

Follow up -Initially weekly for first four weeks, then after 15 days interval.

CRITERIA OF ASSESSMENT

Main signs & symptoms were given different scores, according to their severity and were recorded before and after treatment. Results of therapy were assessed on the basis of comparison of scores recorded before and after treatment. Following scores were given to signs and symptoms

Table 1

Klinnta, Kandu, Daha, Ruk		
0	-	No
1	-	Mild
2	-	Moderate
3	-	Severe

RESULTS

The scoring of criteria of assessment was analyzed statistically in terms of B.T. (Before Treatment), A.T. (After Treatment), S.D. (Standard Deviation), S.E. (Standard Error) and 't' test which was carried out at the level of $p<0.05$ and $p<0.001$.

Table 2

S. No.	Sign/ Symptoms	N	Mean			Relief % age	SD	SE	t	p
			B.T.	A.T.	BT-AT					
1.	Klinnata	20	2.80	0.70	2.10	75.00	0.52	0.11	16.99	<0.001
2.	Kandu	20	2.70	0.80	1.90	70.37	0.30	0.06	27.60	<0.001
3.	Daha	20	2.25	0.70	1.55	68.88	0.51	0.11	13.58	<0.001
4.	Ruk	20	1.5	0.5	1.00	66.66	0.22	0.05	21.00	<0.001

This drug was found very effective for reducing the signs and symptoms in the patients of *Alas*. This drug provided statistically significant relief of 75% in *klinnata*, 70% in *kandu*, 69% in *daha* and 67% in *ruk*. As there was no any oral drug given to the patients, only lepa was applied locally, so, there was no any significant change in hematological profile of the patients.

DISCUSSION

Total 20 patients were registered in present study. Each patient was given *Karanja beejadi lepa* for local application according to lesion, 3-4 times per day. This drug provided very significant relief in klinnata, kandu, daha and ruk. Overall effect of therapy showed that complete remission was obobserved 10% of patients, excellent improvement was noticed in 25% patients followed by moderated imporovement in 55% of patients and mild improvement in 10%.

Maximum ingredients of the formulation have laghu and ruksha guna with the predominance of tikta and kashaya rasa, due to which the drug is predominantly kaph pitta shamak. Alas is also a kaph predominant tridoshaja vyadhi. Therefore, this drug was found very effective in this disease.

CONCLUSION

Karanj beejadi lepa is very effective in the management of *Alas* and it can be better substitute of modern medicines minimizing risk of adverse effects and drug resistance. The drug doesn't cause significant changes in the hematological profile of the patients. This drug shows good tolerability with good compliance to the patients.

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