



UNIQUE JOURNAL OF AYURVEDIC AND HERBAL MEDICINES

Available online: www.ujconline.net

Research Article

EFFECT OF TUTTHADI LEPA IN PSORIASIS

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Received 10-10-2014; Revised 08-11-2014; Accepted 06-12-2014

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ABSTRACT

Background: Psoriasis is one of the most baffling and persistent autoimmune skin disorder, which represent an inflammation pattern of the skin to various stimuli and is characterized by sharply demarcated erythematous plaque/patches/ papules covered with silvery scaling. It affect up to 2.5% of the world population. Like other skin diseases, Psoriasis is also troublesome which has many fold effects on individual's health. The sufferer becomes neglected by the society, as a result of which he/she becomes isolated and loses the capacity even having the physical strength for the service. While various researches have been made in the field of Medical Science, but still there is no absolute, simple, safe & invariably effective permanent cure of Psoriasis has been attain. In Ayurveda the disease Eka-kushtha has been enumerated in the list of eleven Kshudrakushtha. The clinical features of Eka-kushtha as described in Ayurveda are Aswedanam (loss of sweating), Mahavastu (size & no of lesions), Matsyashakalopamam (silvery scalling), which resembles the features of Psoriasis in Modern Medicine. In Ayurveda Samshodhan & Samshaman are the best therapy advocated by Acharyas for cure of Psoriasis. The topically used drugs are very limited for Psoriasis and those which are available have less potency & produce many side effects. So there is need to develop an effective & safe medicine for the treatment of Psoriasis .In Ayurveda, Acharyas have given many drugs used for external application in Psoriasis. Acharya Charak has advocated the Tutthadi lepa for skin disorders. Although there are work on tutthadi lepa but not very so My study is been planned to see the effect of Tutthadi lepa in Psoriasis.

Aim: To evaluate the effect of Tutthadi lepa in Psoriasis.

Material and Method: We had registered 20 patients randomly for the trial with Tutthadi lepa in OPD, Department of Kaya Chikitsa, S.A.C. Lucknow. Tutthadi lepa is applied over Psoriatic lesions by mixing with mustard oil. Period of study was March 2007 to May 2008.

Result: After 4 months of treatment with Tutthadi lepa 75% patients were relieved, 25% patients were improved.

Conclusion: The Tutthadi lepa is safe, effective and economical for the patients of Psoriasis. No side effects have been observed during the trial.

Keywords: Skin, Ayurveda, Psoriasis, Tutthadi lepa.

INTRODUCTION

Skin is the largest organ of the body which protects the body from the outer environment. It is the organ, that reflects many internal disease by changing its character. Psoriasis is an autoimmune papulosquamous disorder that represent an inflammation pattern of the skin to various stimuli. It is characterized by sharply demarcated erythematous plaque/patches / papules covered with silvery scaling¹.

Psoriasis is a common dermatological problem affecting up to 2.5% of the world population. It is more prevalent in the temperate climate & among white races. It is most common in North America, Western Europe, Kenya and Uganda &

uncommon in Mongoloid Asians, Negroes of East Africa and Japanese². In India it has 1% incidence. Psoriasis can affect both male & female. The age group often attack is 15 yr to 40 yr.

While various researches have been made in the field of Medical Science, but still there is no absolute, simple, safe & invariably effective permanent cure of Psoriasis has been attain till today. In Psoriasis the topically applied drugs are very limited and produce many side effects whenever used. So there is a need of hour to have a drug, which gives very good result with minimal recurrence and with no side effects.

In Ayurveda many skin disease have been described under the umbrella of Kushtha. Kushtha has two major divisions i.e.

Mahakushtha & Kshudrakushtha. Eka-kushtha has been enumerated first in the list of Kshudrakushtha³. The features of Eka-kushtha⁴ as described by Acharyas are Aswedanam (loss of sweating), Mahavastu (spread of lesion), Matsyashakalopamam (silvery scaling), which is resemble the disease Psoriasis in Modern Medicine.

As Acharyas have described Samshodhan⁵ & Samshaman⁶ as the treatment of choice in Psoriasis. Samshodhan (Panchakarma) therapy is the key therapy, but Samshaman (local application & internal medication) also play a major role in treating the Psoriasis.

In Ayurveda, Acharyas have formulated many Samshaman drugs i.e. Bahaya Samshaman (drugs for external use lepa etc.) & Abhyantar Samshaman (drugs for internal administration) for the treatment of Psoriasis. The Tutthadi lepa⁷ is one of the best formulation as described by the Acharyas. The preparation and usage of Tutthadi lepa is very easy. It is cost effective and have very few side effects on topical application.

AIM & OBJECTIVE

To evaluate the effect of Tutthadil lepa in Psoriasis.

MATERIALS AND METHODS

Case selection & Study design

We had registered 20 patients of Psoriasis randomly for the trial of Tutthadi lepa, in OPD, Department of Kaya Chikitsa, S.A.C. Lucknow. Period of study was March 2007 to May 2008. Student paired t test applied for statistical analysis.

Inclusion Criteria

Patients having 50% or more of the following clinical symptomatology were selected for the trial.

1. Aswedanam (loss of sweating)
2. Mahavastu (spread of lesions)
3. Matsyashakalopamam (silvery scaling)
4. Krishna-arun varnata (blackish red discoloration)⁸

Exclusion Criteria

1. Complicated cases of Psoriasis with superadded infections.
2. Cases under high doses of corticosteroids.

Criteria of Diagnosis

Cases of Eka-kushtha (Psoriasis) diagnosed according to clinical features of Eka-kushtha i.e. Aswedanam (loss of sweating), Mahavastu (spread of lesion) & Matsyashakalopamam (silvery scaling) & Krishna arun varnata (Blackish-red discoloration).

Grading of Symptoms

Symptoms are graded according to severity of disease as O (nil), + (mild), ++ (moderate) & +++ (severe).

1. Aswedanam (loss of sweating)

Nil	-	O (normal sweating)
Mild	-	+ (little sweating even in hot climate at the site of lesion)
Moderate	-	++ (much less sweating even in hot climate at the site of lesion)
Severe	-	+++ (no sweating at all even in hot climate & skin becomes dry)

2. Mahavastu (spread of lesions)

2A. No of lesions –

- | | | |
|----------|---|----------------------|
| Nil | - | O (Absent of lesion) |
| Mild | - | + (1-5 lesions) |
| Moderate | - | ++ (6-10 lesions) |
| Severe | - | +++ (>10 lesions) |

2B. Size of lesions-

- | | | |
|----------|---|----------------------|
| Nil | - | O (Absent of lesion) |
| Mild | - | + (<5 cm in size) |
| Moderate | - | ++ (5-10 cm in size) |
| Severe | - | +++ (>10 cm in size) |

1. Matshyashakalopamam (silvery scaling)

- | | | |
|----------|---|--|
| Nil | - | O (absent of symptoms) |
| Mild | - | + (scales sometime appear at the site of lesion) |
| Moderate | - | ++ (scales does not remove on scraping) |
| Severe | - | +++ (scales itself remove on lying) |

2. Krishna-arun varnata (Blackish- red discoloration)

- | | | |
|----------|---|---|
| Nil | - | O (absent of symptoms) |
| Mild | - | + (Redness at the site of lesion) |
| Moderate | - | ++ (Blackness at the site of lesion) |
| Severe | - | +++ (Reddish blackness at the site of lesion) |

Trial Regimen & Dosages

Patients of Psoriasis have given Tutthadi lepa for local application for a period of 4 month. It is applied by mixing with mustard oil at bed time. it is used as quantity sufficient.

Preparation method of Tutthadi lepa

Ingredients⁹: Tuttha (Blue Vitriol)¹⁰, Vidang (Embelia ribes) Marich (Piper nigrum), Kushtha (Saussurea lappa), Lodhra (Symplocos racemosa), Manahshila (Red Arsenic)¹⁰.

Method: All the contents of Tutthadi lepa were cleaned, dried, powdered and mixed in equal quantity & stored. Lepa prepared with mustard oil as per lepa preparation method for topical application.

Follow Up

Patients of Psoriasis have been called for 1 month interval for 4 month.

Assessment Criteria

Assessment of clinical improvement was done according to severity of signs & symptoms. To assess the severity symptoms grading scales was used. Difference in scaling before & after treatment and during follow up was tested for significantly bio-statistical methods.

RESULTS

The result was assessed on the basis of improvement in clinical feature in terms of Aarogya (Relieved), Kinchit Aarogya (Improved) & Anaarogya (Unchanged).

1. Aarogya (Relieved) - More than 70% relief in clinical features.
2. Kinchit Aarogya (Improved) - 50-70% relief in clinical features
3. Anaarogya (Unchanged) - less than 50% relief in clinical features.

Table 1: Showing the response of Tutthadi lepa on Aswedanam (loss of sweating) in patients of Eka-kushtha (Psoriasis)

n=20	Severity	Severe	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	X ²	P
	Before Tt	14	5	1	0	0		5	15	75	63.84
After 1 st month	12	4	2	0+2	10						
After 2 nd Month	8	5	3	0+4	20						
After 3 rd Month	0	2	9	0+9	45						
After 4 th month	0	1	4	0+15	75						

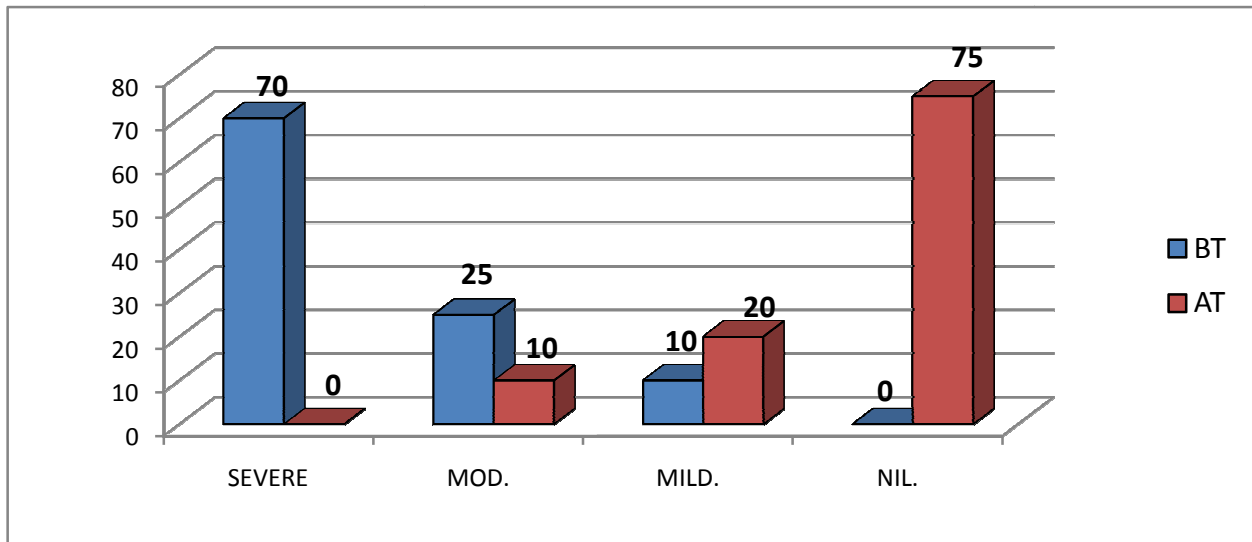


Figure 1: Showing the response of Tutthadi lepa on Aswedanam (loss of sweating) in patients of Eka-kushtha (Psoriasis)

Table 2 A: Showing the response of Tutthadi lepa on Mahavastu (No of lesions) in patients of Eka-kushtha (Psoriasis)

n=20	Severity	Severe	Mod	Mild	Nil	%age	No of cases Improvd	No of cases Relieved	%age Relieved	X ²	P
	Before Tt	3	15	2	0	0		6	14	70	44.22
After 1 st Month	2	12	4	0+2	10						
After 2 nd Month	1	8	6	0+5	25						
After 3 rd Month	0	4	7	0+9	45						
After 4 th Month	0	2	4	0+14	70						

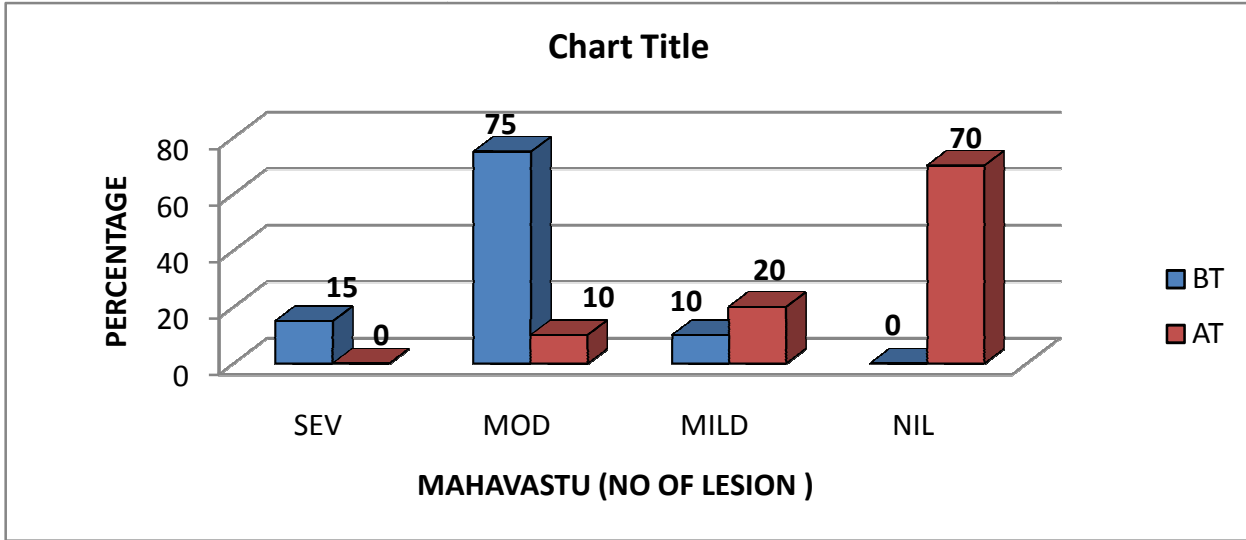


Figure 2: Showing the response of Tutthadi lepa on Mahavastu(No of lesions) in patients of Eka-kushtha (Psoriasis)

Table 2B: Showing the response of Tutthadi lepa on Mahavastu(Size of lesions) in patients of Eka-kushtha (Psoriasis)

	Severity	Severe	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	X ²	P
		Before Tt	2	15	3	0					
n=20	After 1 st Month	1	13	4	0+2	10					
	After 2 nd Month	0	8	8	0+4	20					
	After 3 rd Month	0	5	9	0+6	30					
	After 4 th Month	0	2	4	0+16	70					

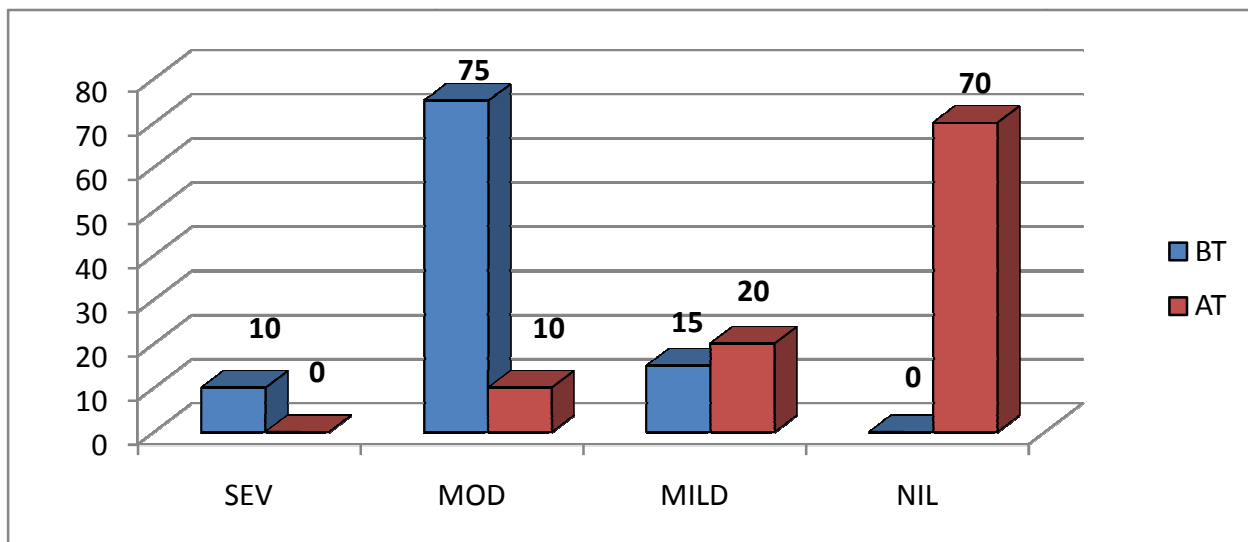


Figure 3: Showing the response of Tutthadi lepa on Mahavastu(Size of lesions) in patients of Eka-kushtha (Psoriasis)

Table 3: Showing the response of Tutthadi lepa on Matsyashakalopamam (Silvery scaling) in patients of Eka-kushtha (Psoriasis)

n=20	Severity	Severe	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	X ²	P
	Before Tt	15	4	1	0	0					
	After 1 st Month	13	3	2	0+2	10					
	After 2 nd Month	9	4	3	0+4	20					
	After 3 rd Month	0	3	9	0+8	40					
	After 4 th month	0	1	4	0+15	75					

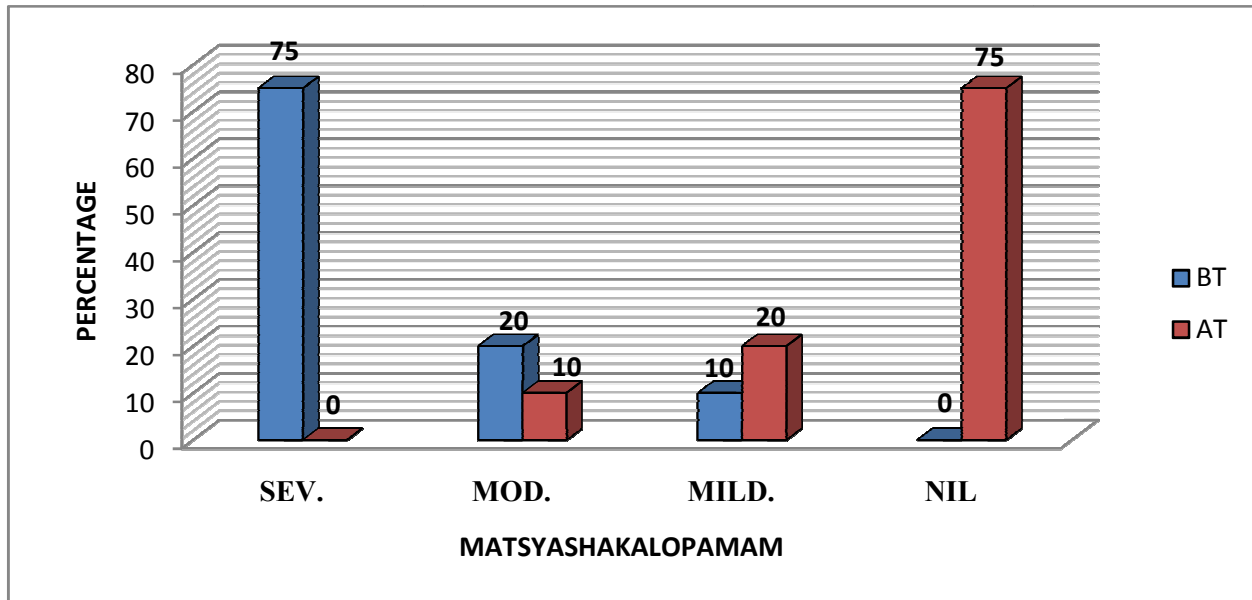


Figure 4: Showing the response of Tutthadi lepa on Matsyashakalopamam (Silvery scaling) in patients of Eka-kushtha (Psoriasis)

Table 4: Showing the response of Tutthadi lepa on Krishna-arun varnata(Blackish-red discoloration) in patients of Eka-kushtha (Psoriasis)

n=20	Severity	Severe	Mod	Mild	Nil	%age	No of cases Improved	No of cases Relieved	%age Relieved	X ²	P
	Before Tt	4	12	1	3	15					
	After 1 st Month	2	10	3	3+2	10					
	After 2 nd Month	1	8	4	3+4	20					
	After 3 rd Month	0	4	5	3+8	40					
	After 4 th Month	0	2	4	3+11	55					

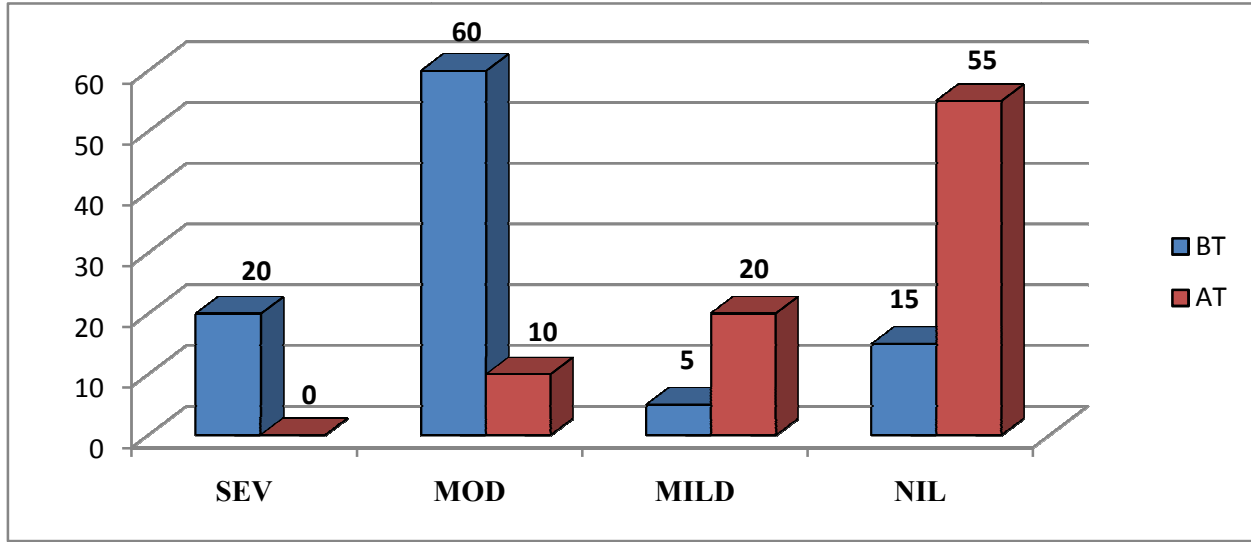


Figure 5: Showing the response of Tutthadi lepa on Krishna-arun varnata(Blackish-red discoloration) in patients of Eka-kushtha (Psoriasis)

Table 5: Showing the Overall Improvement after 4 month of Treatment with Tutthadi lepa

S.N.	Result	No of patients	%age
1.	<i>Aarogya (Relieved)</i>	15	75
2.	<i>Kinchit Aarogya (Improved)</i>	5	25
3.	<i>Anaarogya (Unchanged)</i>	0	0

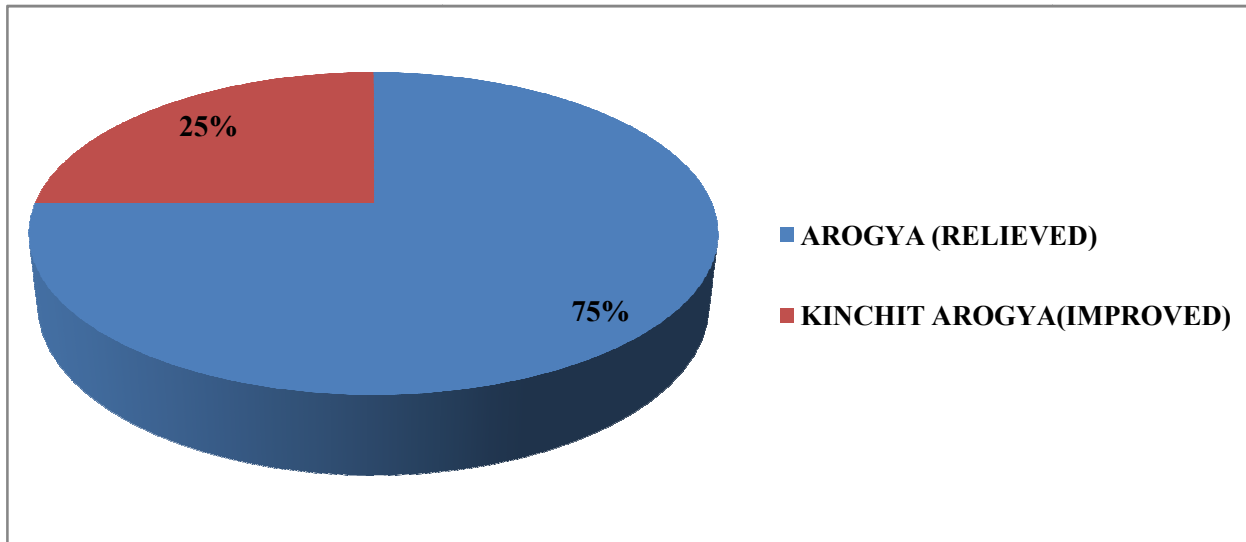


Figure 6: Showing the Overall Improvement after 4 month of Treatment with Tutthadi lepa

DISCUSSION

In Ayurvedic Classics all skin diseases have been described under the heading of Kushtha. The word Kushtha denotes 'Kushnati vapu iti kushtham',¹¹ means the conditions which deforms the skin is called Kushtha. Kushtha is broadly divided in to Mahakushtha and Kshudrakushtha. Eka-kushtha has been enlisted first in the list of Kshudrakushtha, it may be due to its predominance and prevalence in the society.

The clinical features of the Psoriasis are loss of sweating or dryness, erythematous plaques and scaling, and these features mimic the features of Eka- kushtha i.e. Aswedanam (loss of

sweating), Mahavastu (spread of lesion) and Matsyashakalopamam (silvery scaling). So it can be correlated with Psoriasis. In some Research Institution, Psoriasis is correlated with Kitibha and Sidhma.

All Acharyas have advocated Samshodhan followed by Samshaman Chikitsa for the patients of Eka-kushtha. Though Samshodhan is the best therapy, but Samshaman therapy also play a major role in Psoriasis. The effect of Samshaman drugs increased when used after Samshodhan therapy.

We randomly selected 20 patients of Psoriasis for the clinical trial for a period of four months. Tutthadi lepa were given for topical application in the clinical trial. The ingredients of

Tutthadi lepa are Tuttha (Blue Vitriol), Vidang (*Embelia ribes*), Marich (*Piper nigrum*), Kushtha (*Saussurea lappa*), Lodhra (*Symplocos racemosa*), Manahshila (Red Arsenic). The drugs of Tutthadi lepa have Kandughna (relieves itching, soreness), Kushthagna (relieves skin lesions or disorders) and Krimihar (antibacterial and antifungal effect) properties.

The effect of treatment has been observed in 20 patients of Psoriasis. Patients were examined before and after the completion of trial. Before treatment Aswedanam (Loss of sweating) was present in almost all 20 cases of Psoriasis and after treatment it was relieved in 15 patients and remained in 5 patients. Overall percentage of improvement was 75% ($x^2=63.84$, $p<0.001$, S) (Table 1).

Out of 20 patients, before treatment 2 patients were of severe grade, 15 patients were of mod grade and 3 patients were of mild grade of severity of Mahavastu (Size of lesion) and after treatment it was relieved in 14 patients and 4 patients and 2 patients were shifted to mild and mod grade of severity, respectively. Overall percentage of improvement was 70% ($x^2=44.22$, $p<0.001$, S) (Table 2A).

Out of 20 patients, before treatment 2 patients were of severe grade, 15 patients were of mod grade and 3 patients were of mild grade of severity of Mahavastu (No of lesion) and after treatment it was relieved in 14 patients and 4 patients and 2 patients shifted to mild and mod grade of severity, respectively. Overall improvement was 70% ($x^2=46.64$, $p<0.001$, S) (Table 2B).

Out of 20 patients, before treatment 15 patients were of severe grade and 1 patients of mild grade & 4 patient were of mod grade of severity of Matsyshakalopamam (Silvery scaling) and after treatment it was relieved in 15 patients and 4 patients and 1 patient shifted to mild and mod grade of severity, respectively. Overall improvement was 75% ($x^2=63.68$, $p<0.001$, S) (Table 3).

Out of 20 patients, before treatment 4 patients were of severe grade, 12 patients were of mod grade and 1 patient was of mild grade of severity of Krishna-arunvarnata (Blackish-red discoloration) and after treatment it was relieved in 11 patients and 4 patients and 2 patients were shifted to mild and mod grade of severity, respectively.

Overall improvement was 70% ($x^2=30.26$, $p<0.001$, S) (Table 4).

So after four months of treatment with Tutthadi lepa 15 patients (75%) were relieved, 5 patients (25%) were improved (Table 5). No side effects have been observed in patients of Psoriasis, by the application of Tutthadi lepa, except mild irritation in some cases.

CONCLUSION

The following conclusions have been drawn after four months of trial with Tutthadi lepa in patients of Psoriasis:

1. After the end of trial the clinical features were subsided as Aswedanam (Loss of sweating) 75%, Mahavastu (Size and no of lesion) 70% and Matsyshakalopamam (Silvery scaling)

75% and Krishna arun varnata (Blackish-red discoloration) 70%.

2. The topical use of Tutthadi lepa also has Antipruritic, Antibacterial, Antifungal & healing effects.

3. No side effects have been observed during the trial except mild irritation in some cases.

RECOMMENDATION

Tutthadi lepa is safe, effective and economical for the patients of Psoriasis.

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