IAMJ

INTERNATIONAL AYURVEDIC MEDICAL JOURNAL

Research Article ISSN: 2320-5091 Impact Factor: 6.719

EFFICACY OF KARVEERADI TAIL (NERIUM INDICUM OIL BASE PREPARATION) IN MANAGEMENT OF SKIN DISEASE SCABIES

Kanchan Gaidhani[1], Ganesh Hedaoo[2], Sonali Chalakh[3]

1 Lecturer, Department of Agadtantra, B.M.A.M. Nandanwan, Nagpur
2 Lecturer, Department of kriya sharir, B.M.A.M. Nandanwan, Nagpur
3 Professor, Department of Agadtantra, M.G.A.C. Salod, Wardha

Corresponding Author: hedaoo.ganesh@rediffmail.com

https://doi.org/10.46607/iamj0311102023

(Published Online: October 2023)

Open Access

Article Received: 08/09/2023 - **Peer Reviewed:** 25/09/2023 - **Accepted for Publication:** 10/10/2023.

Check for updates

ABSTRACT

Background: *Pama* (**scabies)** is a type of skin disease called *Kushudra-kustha* in Ayurveda. Due to similarities of signs and symptoms, *pama* can be correlated with Scabies. Ayurvedic literature of *Chakradatta*[1], *Karveeradi Tail* is use in the management of *Pama* (Scabies). **Objective:** To study the efficacy of topical application of *Karveerad* tail with comparison standard topical medicinal insecticide Permethrin lotion **Study design:** Single Arm Interventional Clinical Study. **Methodology:** Total 40 Diagnosed patients of *Pama Kustha* (Scabies) having *kandu* (itching), *Toda* (pain), *Daha* (burning), *Pidika* (eruption) and *Strava* (discharge) and divided into two equal groups. Group A was treated with *Karveeradi Tail* and Group B with Permethrin lotion for 21 days. Patients were assessed according to clinical signs and symptoms like *Kandu, Toda, Daha, Pidika) and Strava* during treatment 3rd and 7th day and after treatment on 14th and 21st day. **Result:** Significant improvement was observed in Subjective and Objective parameters like *Kandu, Toda, Daha, Pidika and strav* before and after treatment in both groups. **Conclusion:** Group A treated with *Karveeradi Tail* showed better improvement then group B treated with permethrin.

Keywords: *Pama, Kushdra-kustha, Karveeradi Tail*, Scabies, Permethrin

INTRODUCTION

Scabies in world-wide are estimated to be up to 300 million[2,] A study conducted in ruler area among young people with poor hygiene notify that rate of scabies was 70%[3]. Scabies is contagious parasitic skin infestation caused by the mite named *Acarus scabiei.* It is transmitted from one individual to other by close physical contact. Infestation occurs when the pregnant female mite burrows into skin and lays eggs. The incubation period is 2-4 weeks, after which patient's starts experiencing severe itching and diffusely scattered papules and papules-vesicles. Patients with scabies complain of itching, which is most severe at night [4.]

As per *Ayurveda* literature skin diseases are classified under the name "*Kustha*". which are mainly caused due to disturbance of *dosha vata, pitta, kapha* and four *dushyas* viz *twacha, mamsa, rakta, lasika*[5]. There are 18 types of *Kustha* and classified into two *Mahakushta* and *Kshudrakushta. Pama* is one of the types of *Kshudrakushta* mentioned in *Charaksamhita*[6] and is caused by preponderance of *pitta* and *kapha dosa* [7]. Possess symptoms like *kandu* (itching), *Toda* (pain), *Daha* (burning), *Pidika* (eruption) and *Strava* (discharge) [8]. It resembles Scabies[9]. Scabicide medications are used for treatment of scabies, but their side effects are more such as irritant dermatitis in hot and humid climate, CNS toxicity, and convulsion. Sometimes medications are contraindicated in infants and pregnant patients and used very cautiously. Even after successful treatment, the itching can be continuing, and nodular tension persist. It may persist for weeks even through the mite are gone. However, itching beyond six weeks indicates treatment failure. So, there is a need to evaluate the efficacy of *Karveeradi Tail a* Nirium Indicum oil-based preparation given in Ayurvedic literature *Chakradatta* which will have best-antiscabietic action, within a short period, with negligible side-effect, economical and decreasing the incidence of recurrence of disease. Herb *Karveera (Nerium indicum) is* classified under *upvishavarga*[10] (Low potency poison). It has '*kushthghna'*properties[11.]

MATERIAL AND METHODS

Preparation of *Karveeradi Tail:* The trial drug was prepared according to standardised procedure given in *Sharangdhar Samhita*[12]. It is *Shweta Karveera (*Nerium indicum) leaves with Mustard oil base preparation.

METHOD It is Single Arm. Interventional Clinical Study. A total of 40 diagnosed patients of *Pama-Kustha* or Scabies with symptoms of *Kandu, Toda, Daha, Pidika, Strav selected* and divided equally into two groups. Group A and Group B (20 patients in each group)

Inclusion criteria:

1. Diagnosed cases of *Pama Kustha* (Scabies) with *Kandu, Toda, Daha, Pidika, Strav*
2. Patient between the age group of 15 to 60 years.

Exclusion Criteria

1. Patients suffering from any other systemic disorders such as Skin Tuberculosis, Leprosy.
2. Scabies with complication crust or hyperkeratosis and Secondary infection.
3. Pregnant and lactating women.

Intervention

Group A Treated externally with *Karveeradi Tail.*
Group B- Treated externally with permethrin lotion.
Sufficient amount two times in a day on affected region

Study Duration: 21 days.

Follow Up Period: On 3rd day and 7thday (Before treatment)
14th day and 21st day (After treatment)

Assessment criteria-

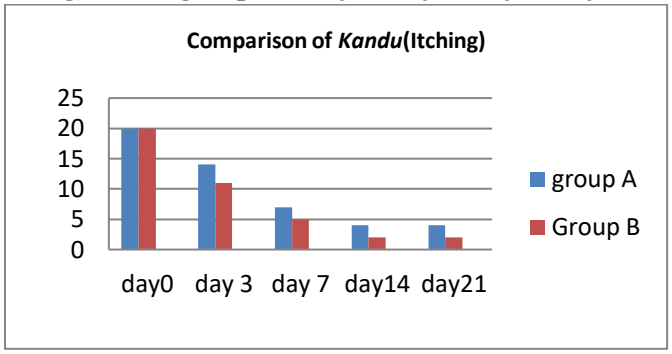
Subjective Criteria: *Kandu* (Itching)**,** *Toda* (Pain)**,** *Daha* (Burning)

Objective Criteria: *Pidika* (Eruption)**,** *Strav* (Discharge)

Statistical Analysis: The obtained data was analysed statistically by Chi-square Test and Fishers Exact P value of < 0.05 was considered as statistically significant and p value < 0.01 and < 0.001 were considered as highly significant.

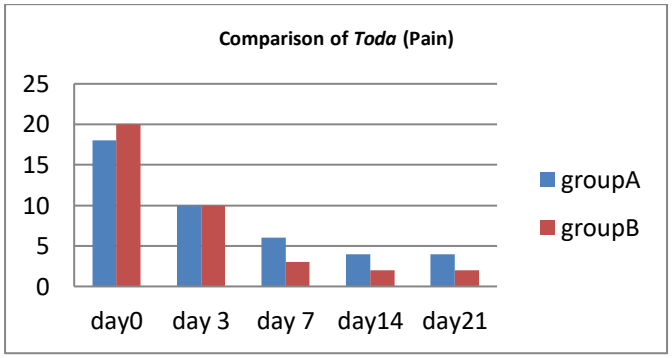
OBSERVATION AND RESULTS:

1.1Comparison of *Kandu*(Itching) in two groups at Day 0, day 3, day 7, day 14 and at day 21



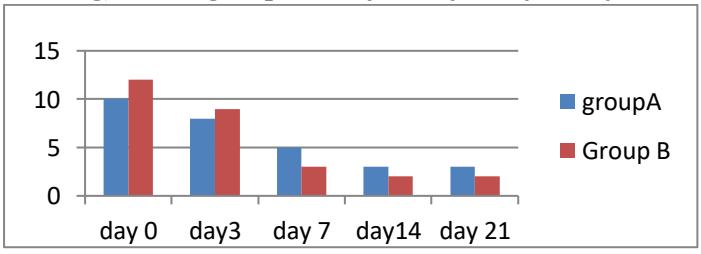
In group A, *Kandu* (itching) before treatment it was 20(100%) and after treatment it was 4(20%) by using fishers exact test statistically significant result was found (p=0.0001S).In group, *Kandu* (itching) before treatment 20(100%) and after treatment was 2(10%).By using Fishers exact test statistically significant result was found (P=0.0001S).

1.2 Comparison of *Toda* (Pain) in two groups at Day 0, day 3, day 7, day 14 and at day 21



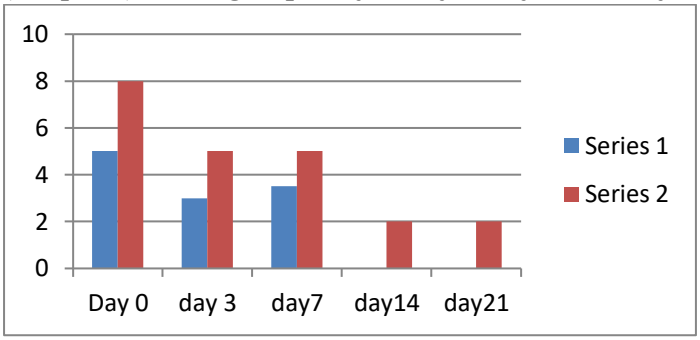
In group A, *Toda* (pain) before treatment was 18(90%) and after treatment it was 4(20%) by using fishers exact test spastically significant result was found. (p = 0.0001S). And in group B *Toda* before treatment 20(100%) and after treatment it was 2(10%). By using fishers exact test spastically result was found (p= 0.0001S).Showing significant effect *Karveeradi* Tail in *pama.*

1.3 Comparison of *Daha* (Burning) in two groups at Day 0, day 3 day 7, day 14 and at day21



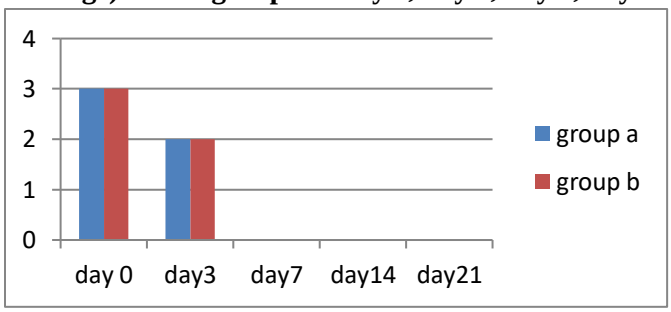
In group A, *Daha* (Burning) before treatment was 10(50%) and after treatment it was 3(15%) by using fishers exact test spastically significant result was found (P=0.04 S). And in group B, *daha* before treatment 12(60%) and after treatment it was 2(10%).by using fishers exact test statistically significant result was found (P=0.0022S).

1.4 Comparison of *Pidika* (Eruption) in two groups Day 0, day 3, day 7, and day 14 and day 21



In group A, *Pidika* (eruption) before treatment was 5(25%) and after treatment it was 0(0%) by using fishers exact test statistically significant result was found (P=0.04S). And in group B, *pidika* before treatment 8(40%) and after treatment it was 2(10%) by using fishers exact test statistically not significant result was found (P=0.06NS).

1.5 Comparison of *Strav* (Discharge) in two groups at Day 0, day 3, day 7, day 14 and at day 21



In group A, *Strav* (discharge) before treatment was 3(15%) and after treatment it was 0(0%) by using fishers exact test spastically not significant result was found (P=0.23NS). And in group B, *strav* before treatment 3(15%) and after treatment it was 0(0%).by using fishers exact test not spastically significant result was found (P=0.23NS), both drugs showing equal effect.

2.1 Relief in subjective parameters in group A

Symptoms	Before Treatment Score	After Treatment Score	Relief Score	% relief
Kandu(Itching)	20	4	16	80%
Toda(Pain)	18	4	14	77.77%
Daha(Burning)	10	3	7	70%
Pidika(Eruption)	5	0	5	100%
Strav(Discharge)	3	0	3	100%

In group A, *kandu* (itching) before treatment score was 20 & after treatment was 4 there was 80% relief. *Toda*(pain) before treatment score was 18 & after treatment 4, there was77.77% relief, *Daha*(burning) before treatment score was 10 & after treatment 3, there was 70%relief, *Pidika*(eruption) before treatment score was 5 & after treatment 0, there was 100%relief, *Strav*(discharge) before treatment score was 3 & after treatment 0, there was 100%relief.

2.2 Relief in subjective parameters in group B

Symptoms	Before Treatment Score	After Treatment Score	Relief Score	% relief
Kandu(Itching)	20	2	18	90%
Toda(Pain)	20	2	18	90%
Daha(Burning)	12	2	10	83.33%
Pidika(Eruption)	8	2	6	75%
Strav(Discharge)	3	0	0	100%

In group A, *kandu* (itching) before treatment score was 20 & after treatment was 2 there was 90% relief. *Toda*(pain) before treatment score was 20 & after treatment 2, there was 90%relief, *Daha*(burning) before treatment score was 12 & after treatment 2, there was 83.33%relief, *Pidika*(eruption) before treatment score was 8 & after treatment 0, there was 2 i.e., 75%relief, *Strav* (discharge) before treatment score was 3 & after treatment 0, there was 100%relief.

2.3 Comparison of group wise and overall percentage improvement in patients

Assessment	Group A	Group B	Total
Complete Remission	0(0%)	0(0%)	0(0%)
Markedly Improvement (>75%)	1(5%)	3(15%)	4(10%)
Moderate Improvement (51-75%)	11(55%)	7(35%)	18(45%)
Mild Improvement (25-50%)	8(40%)	10(50%)	18(45%)
Unchanged (<25%)	0(0%)	0(0%)	0(0%)
Total	20(100%)	20(100%)	40(100%)

Overall improvement seen in *pama* Assessment criteria in group A is (51-75%) which shows moderate improvement and in group B is (>75%) shows markedly improvement.

DISCUSSION

Effect of therapies on Subjective criteria

1. ***Toda*:** In group A, *Toda* (pain) before treatment was 18(90%) and after treatment it was 4 (20%) by using fishers exact test statistically significant result was found (p= 0.0001S).And in group B *Toda* (itching) before treatment 20(100%) and after treatment it was 2(10%). By using fishers exact test spastically significant result was found (p=0.0001S) showing significant result effect *Karveeradi Tail* in *pama*. *Karveeradi Tail* with its *kapha-pittahara* properties absorbs through skin & normalized the function of skin with significant result in *pama kustha.*
2. **Daha:** In group A, *Daha* (burning) before treatment was 10(50%) and after treatment it was 3 (15%) by using fishers exact test statistically significant result was found (p= 0.04S).And in group B *Daha* (itching) before treatment 12(60%) and after treatment it was 2(10%). By using fishers exact test spastically significant result was found (p=0.0022S) showing significant result effect *Karveeradi Tail* in pama. *Karveeradi Tail* with its *pittahara* properties absorbs through skin & normalized the function of pitta and reduces *Daha* with significant result in *pama kustha*.
3. **Kandu:** In group A, *Kandu* (itching) before treatment was 20(100%) and after treatment it was 4(20%) by using fishers exact test statistical-

ly significant result was found (p= 0.0001S).And in group B *kandu* (itching) before treatment 20(100%) and after treatment it was 2(10%). By using fishers exact test spastically significant result was found (p=0.0001S) showing significant result effect *Karveeradi Tail* in *pama*. *Karveeradi Tail* with its *kapha pittahara* properties absorbs through skin & normalized the function of pitta and reduces *Kandu* with significant result in *pama kustha*.

4. **Strav:** In group A, *strav* (discharge) before treatment was 3(15%) and after treatment it was 0(0%) by using fishers exact test not statistically significant result was found (p= 0.23NS).And in group B *Strav* (discharge) before treatment 3(15%) and after treatment it was 0(0%). By using fishers exact test not spastically significant result was found (p=0.23NS) both drugs showing the equal effect.
5. **Pidika:** In group A, *pidika* (eruption) before treatment was 5(25%) and after treatment it was 0(0%) by using fishers exact test statistically significant result was found (p= 0.04S).And in group B *pidika* (eruption) before treatment 8(40%) and after treatment it was 2(10%). By using fishers exact test not spastically significant result was found (p=0.06NS). *Pidika* was present in 5 patients before treatment in group a, there was complete cure in *pidika* in patient after 21st day. Hence *Karveeradi Tail* showed result in *pidika* with high stastical value.

2.4 Discussion on overall effect of Drug

Assessment	Group A	Group	Total
Complete Remission	0(0%)	0(0%)	0(0%)
Markedly Improvement (>75%)	1(5%)	3(15%)	4(10%)
Moderate Improvement (51-75%)	11(55%)	7(35%)	18(45%)
Mild Improvement (25-50%)	8(40%)	10(50%)	18(45%)
Unchanged (<25%)	0(0%)	0(0%)	0(0%)
Total	20(100%)	20(100%)	40(100%)

Overall result after treatment by is analysis statistical of group A was (51-75%) which is showed moderate improvement on the application of *Karveeradi Tail* Comparing the overall result, is the percentage of fully cured patients is far more as compared to partial relief patients. The maximum patients enrolled in the study had shown mild sign and symptoms only and very few were affected with moderate sign and-symptom so after treatment there is moderate improvement was found in final result.

CONCLUSION

Comparison of improvement between subjective and objective parameters shows both groups are effective in reducing all symptoms significantly however, *Karveeradi Tail* showed better improvement over Permethrin lotion. No adverse effect of *Karveeradi Tail* was observed in the study. Hence, it can be a good option for reducing symptoms of scabies.

Acknowledgment - I am very thankful to Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod (H), Wardha for giving me the opportunity and environment to conduct this study.

REFERENCES

1 Chakradatta *samhita* Chikitsa Sangraha of *Chakrapanidatta* by. G .Prabhakara Roa, chi .50/49, Chaukhambha Orientalia 2014, P. 459

2 R.J. Hay , A.C. Steer , D. Eegaman , S. Waiton , Clinical microbiology and Infection ,Volume 18 , 2012 P .313

3 R.J. Hay , A.C. Steer , D. Eegaman & S. Waiton , Clinical microbiology and Infection ,Volume 18 , 2012 P .313

4 Pasricha J.S., Gupta R., Illustrated Textbook of Dermatology 3rd edition new Delhi , J .P Brothers 2006 P.67

5 *Charaksamhita* of *Agnivesh*, Hindi commentary, Vaidyamanorama by Acharya Vidyadharshulka & Prof. Ravi Dutta Tripathi, vol 1 Nidansthan, chi. 5/3 ,Chaukhamba Sanskrit pratishthan Delhi 2017 ,P . 513

6 *Charaksamhita* of *Agnivesh*, Hindi commentary, Vaidyamanorama by Acharya Vidyadhar shukla& Prof. Ravi Dutta Tripathi , vol 1 Sharirsthan, ch.7/4 , Chaukhamba Sanskrit pratishthan Delhi 2017 , P.763.

7 *Susrutasamhita* of *Maharshi Shusruta*, Hindi commentary, Ayurveda- Tattva- Sandipika by Kaviraj Ambikadutta shastri, part 1 *Nidansthan*, Ch. 5/16, chaukhambha Sanskrit sansthan Varanasi 2017, P.322.

8 *Astang Hrdayam* of Srimadvagbhata, Hindi commentary, Nirmala by Brahmanand Tripathi, *Sharirsthan*, ch.3/8, chaukhamba Sanskrit pratishthan Delhi 2017 P. 367

9 *Susrutasamhita* of *Maharshi Shusruta*, Hindi commentary, Ayurveda- Tattva- Sandipika by Kaviraj Ambikadattashastri , part 1 *Sharirsthan*, Ch. 4/4, Chaukhambh 1a Sanskrit sansthan Varanasi 2017 , P.37

10 Aachal A., *Agadtantra*, shree Samarth printer's lavhly prakashan Nagpur, page no.80.

11 The Bhavprakash nighantu with elaborated Hindi commentary by Padmshri prof. K.C. chunekar, edited by late G.S.Pandey: edition of 1998: Guduchyadivarga, verse 82-84, page no- 314-316

12 *Sharandhar Samhita* Hindi commentary, Jiwanprada by Shailaja Shrivastava, *Madhyam khand* 9/1, *Sneha-kalpana*, P .215

Source of Support: Nil
Conflict of Interest: None Declared

How to cite this URL: Kanchan Gaidhani et al: Efficacy of karveeradi tail (nerium indicum oil base preparation) in management of skin disease scabies. International Ayurvedic Medical Journal {online} 2023 {cited October 2023} Available from: http://www.iamj.in/posts/images/upload/2408_2414.pdf