

“Study on the efficacy of Karveeradi Tail in the management of Pama with special reference to Scabies”

DR.KANCHAN GAIDHANI^{1*}, DR.SONALI CHALAKH²

Abstract: Scabies occurs in Individuals at all age group. Factors influencing the distribution of scabies including: age, gender, overcrowding, hygiene and season. Ancient seers categorized all skin disorders under the term “Kustha” By the sign & symptoms “Pama” can be compared with Scabies in modern science. “Study on efficacy of karveeradi Tail in the management of Pama with special reference to scabies”. In this study, 40 patients of Pama will divided into 2 groups (20 in each). In Group A (Control) – Karveeradi Tail will give for local application twice a day and Group B (Experimental) – Permethrin will give for local application twice a day for 7 days. Changes will be observed in subjective and objective outcomes. karveeradi Tail will be more effective than permethrin in Pama.

Keywords: kustha,pama,karveeradi Tail,Scabies, Permethrin

I. Introduction

Skin is one of most important organs of the body because it provides a protecting cover to internal organs¹. It is the largest organ of our integumentary system. As it is the only one which interfaces with the environment, skin plays an important role in protecting the body against pathogens and excessive water loss. Its other functions are protecting against chemicals, particles, ultraviolet radiation (UVR), and microorganisms. Maintenance of fluid balance, shock absorber, sensation, vitamin D synthesis, hormonal and temperature regulation². An interaction that occur between the causative factors and the skin results in specified reaction pattern which leads to the production of characteristic skin lension and their distribution on the body. “Acharya Charaka” and “Vaghbatta” in “Astangasangaha” has mentioned that there are six layers of skin^{3,4}. Whereas “AcharyaSushruta” and “Astanghridayakara” has mentioned seven layers of skin^{5,6}. Ancient seers categorized all skin disorders under the term “kustha” Which are mainly produced by seven factors i.e *Tridosha* and four *dushya* viz. *twacha*, *mass*, *rakta*, *lasika*⁷. *Kustha* is categorized into “Mahakustha” and “Kshudrakustha”. Pama is one of the *kustha* among eighteen types of *Kushdra-kustha* according to “CharakaSamhita”.

Scabies is an infestation caused by the mite, “Acarusscabiei”. It occurs in individuals at all ages. It is transmitted from one individual to other and sometimes from pet animals such as dogs, cats, horses, or any other pet animal (Animal Scabies) by close physical contact. Infestation occurs when the pregnant female mite burrows into skin

¹ PG Scholar, Dept of Agadtantra, Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod(H), Wardha, Datta Meghe Institute of Medical Science, Wardha kanchangaidhani@gmail.com, Contact No: 7385902623

² HOD, Dept of Agadtantra Mahatma Gandhi Ayurved College, Hospital & Research Centre, Salod(H). Wardha, Datta Meghe Institute of Medical Science, Wardha. spchalakh@gmail.com.

and lay eggs. The incubation period of infection is 2-4 weeks, after which patients start experiencing severe itching and diffusely scattered papules and papulo-vesicles. Patients with scabies complain of itching, which is most severe at night⁸. A study conducted in rural area among people notified that rate of scabies was 70%⁹. But in Ayurveda it is caused by preponderance of *pittadosa* and *kaphadosa*¹⁰. In context of Agadtantra, *Karveera* is categorized under upvishavarga (low potency poison). It has *kusthghna* properties. In Samhita, so many medications are mentioned for treatment of *pama*. '*Karveeradi tail*' is one of the formulations mentioned in '*Chakradatta*'¹¹.

The exact number of infected cases in world-wide, are estimated to be up to 300 million. It is notable that particularly the high prevalence figures have been reported in India, south Pacific, and northern Australia. A number of epidemiological factors have been proposed as influencing the distribution of the scabies infestation in population, including: age, gender, overcrowding, hygiene and season¹². Several medications are indicated for scabies but the side effects are much more such as irritant dermatitis in hot and humid climate, CNS toxicity, convulsion. Some medications are contraindicated in infants and pregnant patients and some are most expensive¹³. Even after successful treatment, the itching can be continuing and nodular tension persists. It may persist for weeks even though the mite is gone. However itching beyond six weeks indicates treatment failure.

Keeping in view side effects of recent treatment, we need to evaluate the new medications which are safe and effective. Its method of preparation given in Sharandhar Samhita are simple and cheap¹⁴, so this clinical study is an attempt to evaluate the efficacy of '*karveeradi tail*' and develop a safe and cost-effective medication. Few other articles on skin diseases are studied¹⁵⁻¹⁶.

Methodology: This will be a single arm clinical trial of 40 patients (20 in each group). The subjects will be selected from Kaychikitsa OPD of MGAC, Hospital & Research centre, Salod (H), Wardha.

Eligibility criteria: Patients between age group 16-50 years of either sex suffering from *Pama-kustha*, i.e. Scabies with the symptoms Kandu, Toda, Daha, Pidika, Strav.

Interventions:

karveeradi tail in sufficient quantity on affected area for local application twice a day for 21 days. Permethrin cream in sufficient quantity on affected area for local application twice a day for 21 days.

Investigation during treatment: CBC

Criteria for discontinuing or modifying allocated interventions:

Subjects will be withdrawn from the study if any untoward incidence, features, feature of drug sensitivity or any other disease or problem arises the subjects will be offered free treatment till problem subsides.

Follow up period after treatment:

Follow up period during treatment 3rd and 7th day and after treatment 14th and 21st day. Patient will be advised to take rest, avoid spicy and heavy foods.

Primary outcome:

We will see the effect of interventional drug on *pama*, *Shweta karveera* leaves and sarshap seed oil.

Secondary outcomes: We will see recurrence of interventional drug, total number of participants are 40 (20 in each group). The patient will be recruited by simple random sampling (lottery method)

Implementation: Principle investigator will allocate and enroll the patient.

Methods: Data collection, management and analysis

Subjective: Clinical presentation of *Pama* is described as presence of *kandu, Toda, Daha*.

Objectives: *Pidika* and *Strav*

Clinical presentation of *pama* is described as presence of *Kandu, Toda, Daha, Pidika and Strav* will be graded by present and absent method.

Sr.no	Symptoms	0 day	3rd day	7th day	14th day	21st day
1	<i>kandu</i>	Present	Present	Present	Absent	Absent
2	<i>Toda</i>	Present	Present	Present	Absent	Absent
3	<i>Daha</i>	Present	Present	Present	Absent	Absent
4	<i>Pidika</i>	Present	Present	Present	Absent	Absent
5	<i>Strav</i>	Present	Present	Present	Absent	Absent

Statistical analysis: Mc-nemar test to compare the predictive accuracy of two groups.

Ethical consideration: Study will be started after the ethical clearance from IEC.

Expected Results:

The expected result of this study is that group A with interventions *karveeraditail* is potentially more effective in subsiding the symptoms *kandu, toda, daha, padika and strav*. Patient who will take all follow up by following *pathya* and *Apathya* during treatment will have less chance of reoccurrence of symptoms as compare to group B with intervention permethrin.

II. Discussion

In this protocol two formulation intervention will done in two groups consisting 20 in each group .One group will receive trial drug while another will receive the standard drug. The assessment will be done on the basis of subjective and objective parameters, after that data will be analyzed by using statistical test and present in form table and chart. A number of articles related to different factors and systematic co-morbidities are available ¹⁷⁻⁴².

III. Conclusion

The interventional *karveeraditail* is more effective in *pama* patient as compare to permethrin with least side effects.

IV. References

1. Pasrichaj., Gupta R., Illustrated Textbook of Dermatology 3rd edition new Delhi, J.P Brothers 2006 P.1.
2. Walkar B.R., Colledge N.R., Ralston S.H.,Denman I.D.,Davidson's principles and practice of medicine, Churchill Livingstone Elsevier limited,22nd edition 2014,P.1234.
3. Charaksamhita of Agnivesh,Hindi commentary, Vaidyamanorama by Acharya Vidyadharshukla & Prof.Ravi Dutta Tripathi,Vol 1 sharirasthan ,ch7/4, chaukhamba Sanskrit pratisthan Delhi 2017,P.763.

4. Astangsamgraha of Vagbhat's Hindi commentary by KavirajAtridevagupta, vol 1 sharirasthan, ch.5/24, Chowkhamba Krishnadas Academy Varanasi 2016, p.300.
5. Susruta Samhita of Maharshi Shusruta, Hindi commentary, Ayurveda-Tattva- Sandipika by Kaviraj Ambikadutta Shastri, part 1 sharirasthan, ch.4/4.chaukhambha Sanskrit sansthan Varanasi 2017, p.37.
6. Astang Hridayam of Srimad Vagbhata, Hindi commentary, Nirmala by Brahmanand Tripathi, Sharirasthan, ch.3/8, Chaukhamba Sanskrit Pratishthan Delhi 2017 p.367
7. Charaksamhita og Agnivesh, Hindi commentary, Vidyamanorama by Acharya vidya Dhar Shukla & prof.Ravi dutta Tripathi, vol 1 Nidansthan,ch.5/3, Chaukhamba Sanskrit Pratishthan Delhi 2017,p.513
8. Pasricha J.S., Gupta R., Illustrated Textbook of Dermatology 3rd edition new Delhi, J.P Brothers 2006 p.67
9. R.J. Hay, A.C. Steer, D.Eegaman & Waiton, Clinical microbiology and Infestation, volume 18,2012 p.313
10. Susruta Samhita of Maharshi- Susruta, Hindi commentary, Ayurveda-Tattva- Sandipika by Kaviraj Ambikadutta shastri, part 1 Nidansthan, ch.5/16, Chaukhambha Sanskrit sansthan Varanasi 2017, p.322s
11. Chakradatta Samhita Chikitsasa Sangraha of Chakrapanidatta by. G. PrabhakaraRao, ch.50/49, Chaukhambha Orientalia 2014, p.459
12. R.J.Hay, A.C. Steer, D. Eegaman & S. Waiton, Clinical microbiology and infestation, volume 18,2012 P.313
13. Mathew K.G,Praveen Aggarwal,prep manual for Undergraduates 5th edition New Delhi,Elsevier,2016,17.P.309
14. Sharandhar Samhita Hindi commentary, Jivanpradaby ss Shailaja Shrivastav, Madhyamkhand 9/1, Snehakalpana, p. 215
15. Saoji V, Madke B. Use of low-dose oral warfarin in three cases of livedoid vasculopathy. Indian J Dermatol 2017;62(5):508-511.
16. Henry D, Singh A, Madke B, Kedia P. A case of altered clinical picture of extensive tinea corporis (Tinea as a great mimicker). Iran J Dermatol 2019;22(3):107-109.
17. Papalkar, P., S. Kumar, S. Agrawal, N. Raisinghani, G. Marfani, and A. Mishra. "Heterotaxy Syndrome Presenting as Severe Pulmonary Artery Hypertension in a Young Old Female: Case Report." Journal of Gerontology and Geriatrics 66, no. 2 (2018): 59–61.
18. Charan, N., M. Choudhari, M. Sonkusale, and R. Deshpande. "Anesthetic Management of Chronic Thromboembolic Pulmonary Hypertension for Pulmonary Endarterectomy." Journal of Datta Meghe Institute of Medical Sciences University 12, no. 4 (2017): 289–91. https://doi.org/10.4103/jdmimsu.jdmimsu_40_17.
19. Gaikwad, K.B., N.G. Joshi, and S.P. Selkar. "Study of Nitrosative Stress in 'Pregnancy Induced Hypertension.'" Journal of Clinical and Diagnostic Research 11, no. 3 (2017): BC06–8. <https://doi.org/10.7860/JCDR/2017/23960.9396>.
20. Yadav, S., M. Agrawal, C. Hariharan, D. Dewani, K. Vadera, and N. Krishna. "A Comparative Study of Serum Lipid Profile of Women with Preeclampsia and Normotensive Pregnancy." Journal of Datta

- Meghe Institute of Medical Sciences University 13, no. 2 (2018): 83–86.
https://doi.org/10.4103/jdmimsu.jdmimsu_70_17
21. Kumar, S., P. Bhayani, D. Hathi, and J. Bhagwati. “Hyponatremia Initial Presenting Feature of Normal Pressure Hydrocephalus in Elderly Patient: A Rare Case Report.” *Journal of Gerontology and Geriatrics* 66, no. 3 (2018): 156–57.
 22. Bhinder, H.H.P.S., and T.K. Kamble. “The Study of Carotid Intima-Media Thickness in Prediabetes and Its Correlation with Cardiovascular Risk Factors.” *Journal of Datta Meghe Institute of Medical Sciences University* 13, no. 2 (2018): 79–82. https://doi.org/10.4103/jdmimsu.jdmimsu_58_18.
 23. Khatib, M.N., R. Kirubakaran, S. Gaidhane, A.H. Shankar, and Z. Quazi Syed. “Yoga for Improving Functional Capacity, Quality of Life and Cardiovascular Outcomes in People with Heart Failure.” *Cochrane Database of Systematic Reviews* 2017, no. 7 (2017).
<https://doi.org/10.1002/14651858.CD012015.pub2>.
 24. Cladius, S., U. Jadhav, B. Ghewade, S. Ali, and T. Dhamgaye. “Study of Diabetes Mellitus in Association with Tuberculosis.” *Journal of Datta Meghe Institute of Medical Sciences University* 12, no. 2 (2017): 143–47. https://doi.org/10.4103/jdmimsu.jdmimsu_62_17.
 25. Bhinder, H.H.P.S., and T.K. Kamble. “The Study of Carotid Intima-Media Thickness in Prediabetes and Its Correlation with Cardiovascular Risk Factors.” *Journal of Datta Meghe Institute of Medical Sciences University* 13, no. 2 (2018): 79–82. https://doi.org/10.4103/jdmimsu.jdmimsu_58_18.
 26. Rathi, N., B. Taksande, and S. Kumar. “Nerve Conduction Studies of Peripheral Motor and Sensory Nerves in the Subjects with Prediabetes.” *Journal of Endocrinology and Metabolism* 9, no. 5 (2019): 147–50. <https://doi.org/10.14740/jem602>.
 27. Walinjkar, R.S., S. Khadse, S. Kumar, S. Bawankule, and S. Acharya. “Platelet Indices as a Predictor of Microvascular Complications in Type 2 Diabetes.” *Indian Journal of Endocrinology and Metabolism* 23, no. 2 (2019): 206–10. <https://doi.org/10.4103/ijem.IJEM-13-19>.
 28. Phadnis, P., M.A. Kamble, S. Daigavane, P. Tidke, and S. Gautam. “Prevalence and Risk Factors – Hemoglobin A1c, Serum Magnesium, Lipids, and Microalbuminuria for Diabetic Retinopathy: A Rural Hospital-Based Study.” *Journal of Datta Meghe Institute of Medical Sciences University* 12, no. 2 (2017): 121–32. https://doi.org/10.4103/jdmimsu.jdmimsu_59_17.
 29. Dande, R., A.R. Gadabail, S. Sarode, M.P.M. Gadabail, S.M. Gondivkar, M. Gawande, S.C. Sarode, G.S. Sarode, and S. Patil. “Oral Manifestations in Diabetic and Nondiabetic Chronic Renal Failure Patients Receiving Hemodialysis.” *Journal of Contemporary Dental Practice* 19, no. 4 (2018): 398–403.
<https://doi.org/10.5005/jp-journals-10024-2273>.
 30. Priya, N., Y.R. Lamture, and L. Luthra. “A Comparative Study of Scalpel versus Surgical Diathermy Skin Incisions in Clean and Clean-Contaminated Effective Abdominal Surgeries in AVBRH, Wardha, Maharashtra, India.” *Journal of Datta Meghe Institute of Medical Sciences University* 12, no. 1 (2017): 21–25. https://doi.org/10.4103/jdmimsu.jdmimsu_15_17.
 31. Gaidhane, A., A. Sinha, M. Khatib, P. Simkhada, P. Behere, D. Saxena, B. Unnikrishnan, M. Khatib, M. Ahmed, and Q.S. Zahiruddin. “A Systematic Review on Effect of Electronic Media on Diet, Exercise,

- and Sexual Activity among Adolescents.” *Indian Journal of Community Medicine* 43, no. 5 (2018): S56–65. https://doi.org/10.4103/ijcm.IJCM_143_18.
32. Khatib, M.N., A.H. Shankar, R. Kirubakaran, A. Gaidhane, S. Gaidhane, P. Simkhada, and S.Z. Quazi. “Ghrelin for the Management of Cachexia Associated with Cancer.” *Cochrane Database of Systematic Reviews* 2018, no. 2 (2018). <https://doi.org/10.1002/14651858.CD012229.pub2>.
33. Agarwal, N.K., and S. Trivedi. “The Partial Pressure of Oxygen in Arterial Blood: A Relation with Different Fraction of Inspired Oxygen and Atmospheric Pressures.” *Journal of Datta Meghe Institute of Medical Sciences University* 12, no. 4 (2017): 280–83. https://doi.org/10.4103/jdmimsu.jdmimsu_31_18.
34. Ali, S., B. Ghewade, U. Jadhav, and S. Cladius. “Study of Serum Interferon Gamma in Tubercular Pleural Effusions.” *Journal of Datta Meghe Institute of Medical Sciences University* 12, no. 2 (2017): 93–98. https://doi.org/10.4103/jdmimsu.jdmimsu_53_17.
35. Alka, H.H., Z.R. Prajakta, C.S. Minal, G.N. Madhuri, P. Swati, and A. Aakruti. “Immunohistochemical Analysis of Tumor-Associated Stroma in Oral Squamous Cell Carcinoma with and without Preexisting Oral Submucous Fibrosis.” *Journal of Datta Meghe Institute of Medical Sciences University* 12, no. 3 (2017): 170–76. https://doi.org/10.4103/jdmimsu.jdmimsu_8_17.
36. Alloh, F.T., and P.R. Regmi. “Effect of Economic and Security Challenges on the Nigerian Health Sector.” *African Health Sciences* 17, no. 2 (2017): 591–92. <https://doi.org/10.4314/ahs.v17i2.37>.
37. Bains, S.K., P. John, D. Nair, S. Acharya, S. Shukla, and N. Acharya. “Aptitude of Medical Research in Undergraduate Students of a Medical University - Miles to Go before We Sow.” *Journal of Clinical and Diagnostic Research* 11, no. 12 (2017): JC07-JC11. <https://doi.org/10.7860/JCDR/2017/29318.10972>.
38. Baliga, M. “Scientific Appraisal, Evidence, Publication Points... Are Journals the Imperative Answer?” *Journal of Indian Society of Pedodontics and Preventive Dentistry* 35, no. 1 (2017): 1. <https://doi.org/10.4103/0970-4388.199234>.
39. Baliga, S. “Obituary.” *Journal of the Indian Society of Pedodontics and Preventive Dentistry* 35, no. 3 (2017): 282. https://doi.org/10.4103/JISPPD.JISPPD_217_17.
40. Baliga, S., M. Chaudhary, S. Bhat, P. Bhatiya, N. Thosar, and P. Bhansali. “Determination of Total Antioxidant Capacity of Saliva in Sickle Cell Anemic Patients - A Cross-Sectional Study.” *Journal of Indian Society of Pedodontics and Preventive Dentistry* 35, no. 1 (2017): 14–18. <https://doi.org/10.4103/0970-4388.199219>.
41. Basakhete, U., A. Jaiswal, S. Deolia, S. Sen, M. Dawngliani, and A. Jaiswal. “Prevalence of Tobacco Use among School Children Reporting to Dental Hospital for Treatment.” *Journal of Datta Meghe Institute of Medical Sciences University* 12, no. 4 (2017): 242–45. https://doi.org/10.4103/jdmimsu.jdmimsu_28_18.
42. Behere, P.B., K. Kumar, and A.P. Behere. “Depression: Why to Talk?” *Indian Journal of Medical Research* 145, no. April (2017): 411–13. https://doi.org/10.4103/ijmr.IJMR_295_17.