

A Non-Randomized Clinical Evaluation of Moolakadya Taila in Chronic Non-specific Low Back Pain

Professor (Dr.) Milind Hukkeri, Department of RS & BK, ALNRMAMC, Koppa

Abstract: Chronic low back pain with unknown etiology has become problems for bigger chunk of population. It overlaps the number of patients when compared with pain of known etiology. Suffering happens to greater part of life. People dependencies on NSAIDs and other pain killers brings alternative effects too. Charak Samhita considers such pain as Kaphavrita vata. Oral application of Moolakadya tail is suggested for such problems. It shows relief in pain as well in stiffness.

Keywords: Non-specific chronic low back pain, NSAIDs, Charak Samhita, Moolakadya tail.....

Low back pain is a major cause of disability across the globe which affects the performance of anyone at work as well as general well-being². It may be acute, sub-acute or chronic. Persistent low back pain for 12 weeks or more is categorized under chronic pain⁴. The risk factors may vary viz., occupational posture, depression, obesity etc. In many cases, origin of such low back remains unknown¹. Those with unknown cause are called as non-specific low back pain³. In other words, they are termed as non-specific as they may be due to multiple biologic and behavioral etiologies⁴. Based on differential diagnosis of chronic low back pain, 70% is non-specific pain while 27% being mechanical pain, 2% referred pain and 1% non-mechanical pain⁵. Balague and colleagues (2011) reported the life-time prevalence of low back pain as 84%, and for chronic low back pain it is about 23%⁷. So, it can be observed as much common problem. Non-steroidal anti-inflammatory drugs (NSAIDs) are mainly used for reliefs. Physiotherapy, Yoga, Acupuncture etc. are also practiced throughout the world.

In Ayurveda, such pain can be correlated with kaphavrita vata condition in which vata is blocked or hindered by kapha. Charak Chikitsa 28/62 deals with pain due to kaphavrita vata⁶. Many of formulations are explained by Charak Samhita chapter 28 for various types of Vata related problems viz., *Mulaka taila*, *Sahachara taila*, *Bala taila* etc. Internal application of *Moolakadya taila* is suggested in Chapter 28/167-169 for even serious types of vatika diseases⁶.

A. Materials and Methods:

I. Formulation preparation (Reference C.S. 28/167-169)

Ingredient	Form	Weight
Moolaka (<i>Raphanus sativus</i> Linn.)	Fresh juice of small variety (liquid)	1 kg
Codugdha (Cow's milk)	Liquid	1 kg
Sour godadhi	Liquid	1 kg
Kanji	Liquid	1 kg
Tila tail (Sesame oil)	Liquid	1kg
Water	Liquid	4 kg
Kalka dravyas:	Solid form	

12.5 gm each of Pippali, Ativisha, Rasna, Chavya, Agar, Shigru, Shuddha Bhallataka, Vacha, Kustha, Gokshura,

Shunthi, Pushkarmoola, Shati, Bilwa, Shatavha, Tagara and Deodaru.

Method of Preparation: All liquid ingredients were mixed. Powder of kalka dravyas were mixed one after another and the mixture was added with sufficient quantity of water separately. They were added together. The mixture was brought to fire and heating was done mildly till the madhyama paka lakshana was observed. Now oil was filtered, when it was still hot. It was stored in amber coloured glass bottles. The formulation was prepared by Bhanu Healthcare, Hubli.

I. Patients selection:

Method : Non-randomized convenient method

Hospital : Swami Samarth Hospital, Hubli

Age, Gender and Religion : 30 Patients of age group 20-60 groups irrespective of gender and religion

II. Inclusions criteria: A person with history of 6 months with at least 3 months of pain days. The patients who accepted not to take any medicine for one week before the time of admission.

III. Exclusion criteria: A person with degenerative disks and facets, herniated disk, osteoporotic fracture, spinal stenosis, traumatic fracture, congenital diseases, spondylosis, discogenic pain, aortic aneurysm, diseases of pelvic organs, gastrointestinal diseases, renal diseases, neoplasia, inflammatory arthritis, infection, paget disease of bone, osteochondrosis and cancer.

IV. Intervention: First 3 months medicine was given 10ml thrice after meal with water. Then it was discontinued.

V. Observations: They were made at the time of admission, thereafter on 1st, 2nd and 3rd months of application and even after 2 months in follow-up.

VI. Scores for pain and stiffness:

Pain Scale

0: No pain

1: Annoying

2: Uncomfortable

3: Horrible

4: Agonizing

Stiffness scale (Stiffness occurring throughout the day was considered)

0: No stiff

1: Slightly stiff

2: Moderate stiff

3: More stiff

4: Worst stiff

VIII. Statistical Analysis: Wilcoxon signed rank test was used for both pain scale and stiffness scale for after third month of observation only as it was similarly observed in follow-up too.

B. Result:

For Pain

Table Number: 1

Mean and Standard Deviation of Pain Scale Before and After Treatment

	N	Mean	Std. Deviation	Minimum	Maximum
Before Treatment	30	1.7333	0.44978	1.00	2.00
After Treatment	30	0.3667	0.49013	0.00	1.00

Significance: $p < 0.05$

For Stiffness

Table Number: 2

Mean and Standard Deviation of Stiffness Scale Before and After Treatment

	N	Mean	Std. Deviation	Minimum	Maximum
Before Treatment	30	1.6333	0.88992	0.00	3.00
After Treatment	30	0.5000	0.68229	0.00	2.00

Significance: $p < 0.05$

Chart Number: 1

Showing Pain Percentage of People With Annoying Pain And Uncomfortable Pain Before Treatment



Chart Number: 2

Showing Pain Percentage of People With No Pain And Annoying Pain After Treatment



Discussion: Pain relief and loss in stiffness were observed in all patients. Statistically significant result suggests the efficacy of result in pain and stiffness of unknown etiology. Most of ingredients of the formulation are with teekshna property and ushna veerya, so they are kapha-vataghna, hence it is used in kapharita vata⁸. Teekshnata is used to penetrate the obstruction and ushnata is used to melt down the parts of obstruction. Base of oil and fatty acids from milk and godadhi is suitable to carry the compounds inside the cells and obstructions. Details of pharmacokinetics and pharmacodynamics of formulations are needed to study separately.

References:

1. http://www.who.int/medicines/areas/priority_medicines/Ch6_24LBP.pdf
2. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(12\)61729-2/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)61729-2/abstract)
3. <http://www.nytimes.com/health/guides/disease/nonspecific-back-pain/overview.html>
4. <http://www.aafp.org/afp/2011/0815/p437.html>
5. <http://www.aafp.org/afp/2009/0615/p1067.html>
6. Anonymous: *Charak Samhita*. Translation and Critical Exposition by R. K. Sharma and Bhagwan Das. Chowkambha Sanskrit Series Office, Varanasi.
7. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(11\)60610-7/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(11)60610-7/abstract)
8. Anonymous: Bhavaprakash Nighantu. Commentary By Vishwanath Dwivedi. Motilala Banarasidas Publishers Pvt. Ltd.