

**EFFECT OF *ERANDAMOOLADI NIRUHA BASTI* WITH
RASNAERANDADI KASHAYAM IN THE MANAGEMENT OF
*KATIGRAHA W.S.R. TO LUMBAR DISC HERNIATION – A PILOT
CLINICAL STUDY***

Dr. Neetu Dixit^{*1} and Dr. Babita Dash²

¹M.D. Scholar, PG Department of Panchakarma;

²Lecturer, PG Department of Panchakarma;

Pt. Khushilal Sharma Govt. (Autonomous) Ayurveda College & Institute Bhopal (M.P.).

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***Corresponding Author**

Dr. Babita Dash

Lecturer, PG Department of
Panchkarma; Pt. Khushilal
Sharma Govt.

(Autonomous) Ayurveda
College & Institute Bhopal
(M.P.).

ABSTRACT

Lumbar disc herniation (LDH) is a common lumbar spinal disorder. It is one of the most common disease that produces low back pain and/or leg pain in adults. A herniated disc is a displacement of disc material (nucleus pulposus or annulus fibrosis) beyond the intervertebral disc space.^[1] LDH may be correlated with *Katigraha* in *Ayurveda* on the basis of clinical features of the disease where *Vatadosha* with or without *Aamadosha* settles in *Kati* and cause pain and stiffness in the *Katipradesh*(lumbar region). In the present study 6 patients of lumbar disc herniation were advised the treatment modality like *Katibasti* with *Mahanarayan tail*, *Erandamooladi Niruha Basti* along with *Rasnaerandadi Kashayam* orally for 16 days which was found very effective in relieving the sign and symptoms of LDH.

KEYWORDS: LDH, Katigraha, Katibasti, Erandamooladi Niruha Basti.

INTRODUCTION

LDH is very commonly found health problem among both rural and urban population. In 95% of the lumbar disc herniation case the most affected sites are L4 - L5 and L5 – S1 discs.^[2] LDH occurs 15 times more than cervical disc herniation and is an important cause of lower back pain. The prevalence of a symptomatic herniated lumbar disc is about 1% to 3% with the highest prevalence among people aged 30 to 50 years, with a male to female ratio of 2:1.^[3]

LDH process begins from failure in the innermost annulus rings and progresses radially outward. The damage to the annulus of the disc appears to be associated with fully flexing the spine for a repeated or prolonged period of time. The nucleus loses its hydrostatic pressure and the annulus bulges outward during disc compression.^[4]

The common symptoms of LDH are lower backache with or without radiation, stiffness in the lumbar spine, tingling / or numbness in lower limbs.

Kati, *Shroni*, and *Trika* are synonymously used in *Ayurvedic* classics which usually refers to lumbar region. LDH may be correlated with *Katigraha* in *Ayurveda* on the basis of clinical features of the disease. *Katigraha* as an independent disease entity for the first time has described in *Gadanigraha*^[5] in *Vata vyadhi* chapter with the same description made available in *Bhavaprakasha*.^[6] Where *Vata dosha* with or without *Aama dosha* settles in *Kati* and cause pain and stiffness in the *Katipradesh*(lumbar region).

In modern medicine, treatment of LDH involve limited conservative and surgical procedures. Drugs like analgesics, NSAIDS and steroids are used for reducing pain and inflammation. Anticonvulsant and antidepressant drugs for radicular pain, which provide only symptomatic relief along with hazardous side effects. Lastly surgery which is quite expensive and needs hospitalization and may also cause adverse effects.

In this disease pain and stiffness is found to be present at lumbar region, therefore local *Snehana* and *Swedana* are very effective and provide quick results. *Bahya Snehana* and *Swedana* helps in reducing the pain, stiffness of the lumbar spine and increased the blood circulation.

Basti is said to be best treatment for all *Vatik* disorders. It is highly acclaimed by *Aacharya Charak* and described as *Ardhachikitsa*. *Niruhabasti* having property of *Shothahara*, *Vedanahara* and acts on the *Sukshma srotas* of the body.

Hence an effort is made to evaluate the effect of *Katibasti* and *Erandamooladi Niruha Basti* along with *Rasna Erandadi Kashayam* in the management of LDH.

AIMS AND OBJECTIVES

To evaluate the effects of *Katibasti* and *Erandamooladi Niruha Basti* along with *Rasnaerandadi Kashayam* in the management of *Katigraha* w.s.r. to lumbar disc herniation.

MATERIAL AND METHODS

In the present study, 6 patients who were attending the OPD and IPD of Pt. Khushilal Sharma Govt. Auto. Ayurvedic Hospital Bhopal with clinical sign and symptoms of *Katigraha* w.s.r. to LDH were selected for the study.

Diagnostic criteria

- Pain in lower back with or without radiation.
- Stiffness of the lumbar region.
- Restriction of movement of lumbar region.
- Tingling sensation and/or Numbness in one or both lower limbs.
- MRI changes suggestive of lumbar disc herniation.

Inclusion criteria

- Patients fulfilling the diagnostic criteria.
- Patients willing to sign the consent for participation in study.
- Patients fit for *Basti Karma*.

Exclusion criteria

- Patients contraindicated for *Basti Karma*.
- Patients having Spinal tumour, Tuberculosis, Malignant disease of the pelvis, fracture of spine, Congenital or acquired skeletal deformity.
- Any traumatic condition of spine leading to paralysis.
- Recent lumbar surgery or implanted instrumentation or prosthesis.
- Pregnant and lactating women.
- Having Chronic pathologies eg. Ankylosing spondylosis, Rheumatoid arthritis, Psoriatic arthritis, Gouty arthritis or any other systemic illness.

Treatment regimen

- *Katibasti* with *Mahanarayan tail* along with local *Abhyanga Swedana*.
- *Kala Basti plan* (16 days)-
Erandamooladi Niruha Basti^[7]– 625ml
Anuvasana Basti with *Sahachara tail*^[8]– 100ml
- *Shamana drug* – *Rasnaerandadi Kashayam*^[9] 20 ml twice a day.

Ingredients of Erandamooladi Niruha Basti

Dravya (Materials)		Qty.
Madhu (Honey)		70ml
Saindhavlavana (Rock salt)		5gm
Til tail		70ml
Kalka Dravya		10gm
1. Shatahwa	Foeniculum vulgare	
2. Hapusha	Juniperus communis	
3. Priyangu	Callicarpa macrophylla	
4. Pippali	Piper longum	
5. Madhuka	Glycyrrhiza glabra	
6. Bala	Sida cordifolia	
7. Rasanjana	Berberis aristate	
8. Vatsakbeej	Holorrhena antidysenterica	
9. Musta	Cyperus rotundus	
Kwatha Dravya		450ml
1. Erandamoola	Ricinus communis	
2. Palash	Butea monosperma	
3. Shalparni	Desmodium gangeticum	
4. Prashnaparni	Uraria picta	
5. Vrahti	Solanum indicum	
6. Kantakari	Solanum surattense	
7. Gokshur	Tribulus terrestris	
8. Rasna	Pluchea lanceolate	
9. Ashwagandha	Withania somnifera	
10. Atibala	Abutilon indicum	
11. Guduchi	Tinospora cordifolia	
12. Punarnava	Boerhavia diffusa	
13. Aaragwadha	Cassia fistula	
14. Devadaru	Cedrus deodara	
15. Madanphala	Randia spinosa	
Gomutra		20ml

Preparation of Basti

Erandamooladi Niruha Basti was given as per Kala Basti (10 Anuvasana and 6 Niruh Basti) schedule. Initially 70 ml of madhu was taken for Niruha Basti along with 5gm of Saindhava Lavana and was stirred well. 70 ml of Til tail was added and mixed well then added 10 gm kalka dravya(fine powder form) and mixed. Erandamooladi Kwatha was prepared by Kwatha vidhi. Finally 450 ml of prepared Erandamooladi Kwatha was added, mixed well and homogenous mixture was obtained. It was filtered and added 20 ml Gomutra, kept in Basti putak and was made luke warm before administration. Both Anuvasana and Niruha Basti was given in left lateral position as mentioned in the Ayurveda texts. Pathya and Apathya were advised to the patients during and after the treatment.

Duration of study – 16 days

Follow up – 15 days

Criteria for assessment

Both subjective and objective parameters were employed for the assessment of the effect of the treatment.

SUBJECTIVE CRITERIA

Pain

Parameters	Gradation
No pain	0
Mild pain but no difficulty in walking	1
Moderate pain and slight difficulty in walking	2
Severe pain with severe difficulty in walking	3

Stiffness

parameters	Gradation
No stiffness	0
Some time for 5-10 minutes	1
Daily for 10-30 minutes	2
Daily for 30-60 minutes/more than 1hrs	3

Numbness

Parameters	Gradation
No numbness	0
Occasionally once in a day for 5-10 minutes	1
Daily once in a day for 10-30 minutes	2
Daily for more than 30-60 minutes	3

Tingling

parameters	Gradation
No tingling	0
Occasionally once in a day for 5-10 minutes	1
Daily once in a day for 10-30 minutes	2
Daily for more than 30-60 minutes	3

OBJECTIVE CRITERIA

SLR test

Angle	Gradation
Equal to or greater than 90 ⁰	0
71- <90 ⁰	1
51-70 ⁰	2
31-50 ⁰	3
< 30 ⁰	4

ODI scale

Interpretation of scores		Grade
0% to 20%: minimal disability:	The patient can cope with most living activities. Usually no treatment is indicated apart from advice on lifting sitting and exercise.	0
21%-40%: moderate disability:	The patient experiences more pain and difficulty with sitting, lifting and standing. Travel and social life are more difficult and they may be disabled from work. Personal care, sexual activity and sleeping are not grossly affected and the patient can usually be managed by conservative means.	1
41%-60%: severe disability:	Pain remains the main problem in this group but activities of daily living are affected. These patients require a detailed investigation.	2
61%-80%: crippled:	Back pain impinges on all aspects of the patient's life. Positive intervention is required.	3
81%-100%:	These patients are either bed-bound or exaggerating their symptoms.	4

Braggard's sign test

Grade 0 – Negative

Grade 1 - Positive

Femoral nerve stretch test

Grade 0 - Negative

Grade 1 - Positive

Statistical analysis

The scoring of criteria of assessment was analysed statistically in terms of mean values of B.T. (Before Treatment), A.T.(After Treatment), S.D.(Standard Deviation) and S.E. (Standard Error). The results obtained were considered significant for p value <0.01 and insignificant for p value >0.05.

RESULTS**Table No. I: Showing effect of therapy in subjective parameter.**

S.No.	Symptoms	Mean		Difference	% of changes	SD	SEM	W	P Value	Result
		BT	AT							
1.	Pain	2.667	0.5000	2.167	81.25	0.4082	0.1667	21	0.0156	Significant
2.	Stiffness	1.833	0.1667	1.667	90.94	1.033	0.4216	15	0.0313	Significant
3.	Numbness	1.167	0.333	0.8333	71.40	0.9832	0.4014	6	0.1250	Insignificant
4.	Tingling	2.000	0.3333	1.667	83.35	0.8165	0.3333	15	0.0313	Significant

Table No. II: Showing effect of therapy in objective parameter.

S.No.	Objective parameter	Mean		Difference	% of changes	SD	SEM	t Value	p Value	Results
		BT	AT							
1.	SLRT	1.500	0.1667	1.333	88.86	0.8165	0.3333	4.000	0.0052	Very Significant
2.	ODI Scale	2.333	0.6667	1.667	71.45	0.5164	0.2108	7.906	0.0003	Extremely Significant
3.	Braggard's sign test	0.5000	0.000	0.5000	100	0.5477	0.2236	2.236	0.0378	Significant
4.	Femoral nerve stretch test	0.8333	0.1667	0.6667	80.00	0.5164	0.2108	3.162	0.0125	Significant

SD: Standard Deviation, SEM: Standard Error of Mean.

ADVERSE EFFECTS

There were no any adverse effects or adverse drug reaction was noted during and after the study duration.

DISCUSSION

LDH is a common lower back disorder in the present era. Disturbed lifestyle and postural defects leads to this disorder. A herniated disc is a displacement of disc material beyond the intervertebral disc. LDH may be correlated with Katigraha in Ayurveda and it is consider in vatavyadhi.

Katibasti was given as it is Bahya sthanik Snehana (external local oleation) and Swedana (sudation) procedure which mainly acts against the Ruksha guna (dryness) and Sheeta guna (coldness) respectively of Vata.^[10]

Sthanik Abhyanga (massage) acts on the root of Mansavahasrotas i.e. Snayu, Twak and Raktavahini. It may thus nourish the superficial and deep muscles and make the joints stable. Swedan is Stambhagna (removes stiffness) and Kapha-Vata nirodhana (removing excess vata and kaphadosha). Thus by its action, the Sroto sanga vighatana (breakdown the pathogenesis by removing obstruction in the micro channels) may take place and stiffness of the joints relieved.^[11]

Charaka gives an opinion that Asthapan and Anuvasan are the best choices of treatments to control the vata. Destruction of vata in its root place i.e. Pakwashaya by Niruha Basti. Nourishing of root place of vayu (Guda and Pakwashaya) by Anuvasan Basti.

Erandamooladi Niruha Basti is told as Deepan and Lekhana in nature which helps in pacifying kapha and reducing symptoms like stiffness and numbness. Anti-inflammatory, anti-oxidant, analgesic, antinociceptive activity, bone regeneration activities are found in Eranda which is the main content of the Erandamooladi Niruha Basti. Eranda is said to be the best in pacifying Vata by Acharya Charaka. Erandamooladi Niruha Basti which contains 24 drugs among them maximum number drugs having UshnaVeerya, which is specially indicated in pain and stiffness located lumbar region.^[12]

Sahachara Tail indicated in DarunaVatavyadhi by Acharya Charaka so, it is helpful in pain and nourish the root place of vayu (Pakwashaya).

Rasnaerandadi Kashayam having anti-inflammatory, analgesic properties may help in reducing compression of nerve by reducing inflammation of articular cartilages as well as disc.

Thus, this treatment regimen are shows significant improvement in the Katigraha (LDH).

CONCLUSION

The result shows that the Kati Basti, Erandamooladi Niruha Basti and Rasnaeradadi Kashayam were found very effective in relieving the sign and symptoms in LDH (Katigraha) with increased functional activities. However, further work should be done on large samples to draw the final conclusion.

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