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## Research Article

### AYURVEDIC MANAGEMENT OF LUMBAR SPONDYLOLISTHESIS: CASE REPORT

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#### ABSTRACT

Background: Spondylolisthesis is a condition involving spinal instability which causes pain in the lumbosacral area. Low back pain affects approximately 60-85% of adults and lumbar spine is responsible for about 10% of all the back pain conditions. The present article deals with a case of diagnosed isthmic spondylolisthesis. The lumbar spondylolisthesis can be compared with gridhrasi in Ayurveda as the clinical features mentioned are almost the same. Methods: Ayurvedic internal medicines like Bhadradarvadi kashaya and Simhanada guggulu combined with Sahacharadi tailam matra basti were given. At the end of the treatment the patient was relieved of the symptoms and the general conditions also improved. Conclusion: Matra vasti with Sahacharadi tailam and internal medicines can be a potential treatment for Gridhrasi with special reference to Spondylolisthesis.

**Keywords:** Bhadradarvadi kashayam, case report, gridhrasi, lumbar spondylolisthesis, sahacharadhi taila matra basti.

#### INTRODUCTION

Low back pain is the commonest cause of sickness-related absence from work. Backpain is the most common symptom of disability in patients between 30 and 70 years of age. LS is responsible for about 10% of all the backpain conditions<sup>1</sup>. The occurrence of low back pain in India is also alarming with nearly 60% of the people in India have suffered from low back pain at some time during their lifespan<sup>2</sup>.

Backache is a very common malady next to headache. The most common site for degenerative anterolisthesis is L4-L5. The disc is composed of two parts, centrally it is made of nucleus pulposus and peripherally it has annulus fibrosus which is a fibrocartilaginous tissue. With age the water content of the disc decreases, fibrous tissue and cartilage cells increase and the nucleus becomes granular and friable. The lumbar spondylolisthesis can be compared with gridhrasi in Ayurveda. Gridhrasi is one among the vataja nanatmaja vikara<sup>3</sup> with symptoms such as sthamba (stiffness), ruk (pricking pain) and toda (repeated twitching) starting from low back. The study is carried out as per International conference of Harmonization-Good Clinical Practices Guidelines (ICH-GCP).

#### CASE DESCRIPTION

##### General demographics

A 45 years old male working as a manager in an automobile manufacturer company came to OPD of Sri Jayendra Saraswathi Ayurveda College and Hospital, Nazarathpettai, Chennai, Tamilnadu. He reported numbness in the right thigh and urgency for micturition as the chief complaints for the past one month. The patient had a history of occasional low back pain in the past 2-3 months.

#### HISTORY OF PRESENTING CONDITION

The patient was initially examined by a general physician and diagnosed as having chronic inflammatory polyneuropathy. The nerve conduction velocity (NCV) test was within normal limit. He was under medications consisting of Methylcobalamin, vitamin B6, Alpha lipoic acid, Folic acid and Pregabalin for a period of 1 and ½ months.

#### TREATMENT HISTORY

Before coming to our OPD he was consulted by a General physician where he was advised for NCV test and the NCV test results was normal, he was prescribed with tablets containing Methylcobalamin, vitamin B6, Alpha lipoic acid, Folic acid and Pregabalin once daily at night after dinner. Despite of 1 and ½ months of oral medicine there was no improvement.

#### Declaration of patient consent

The authors certify that they have obtained all patient consent forms. In the form the patient has given his consent for his images and other relevant clinical information to be used in the journal.

#### GENERAL EXAMINATION

Blood pressure – 120/80 mmHg  
Respiratory rate – 18/min  
Edema – absent  
Icterus – absent  
Clubbing – absent  
Cyanosis – absent  
Pallor - absent

**Table 1: Examination**

TESTS	RIGHT LEG	LEFT LEG
SLRT	60	>70
EHL power	Grade 3	Grade 4
FHL power	Grade 3	Grade 4
Ankle jerk	Grade 3	Grade 2
Slump test	+ve	-ve
Well leg raising test	+ve	-ve
Femoral nerve stretch test (reverse SLRT)	-ve	-ve

## INVESTIGATION

MRI of LS spine with whole spine screening report showed minimal disc bulge seen in L4-L5, L5-S1 level. Lumbar canal anteroposterior diameter at L4-L5 is about 0.9cm and L5-S1 is 0.8cm.

## POSOLOGY

The following drugs were used in this case.

**Table 2: Intervention**

AUSHADA	MATRA	ANUPANA	INGREDIENTS
Bhadradarvadi kashayam	15ml (B/F)	60ml Lukewarm water	Devararu, nata, kushta, dasamoola, bala, atibala
Simhanada guggulu	2tablets (A/F)	Lukewarm water	Triphala, gandaka, shuddha guggulu, eranda taila
Sahacharadhi tailam	70ml	Shatapushpa choorna and saindhava lavanam (1gm)	Sahachara, dasamoola, satavari, usira, nakha, kushta, hima, ela, sprikka, priyamgu, nalika, hribera, silaja, lohita, agaru, surahwa, kopana, misi, turushka, nata

## PROCEDURE

Oral medications and matra basti with Sahacharadi taila was given for a period of 14 days after local abhyanga (oleation) and nadi swedana (sudation).

## RESULT

The patient was re-evaluated 15 days after the initiation of treatment. All the post treatment assessments were performed.

**Table 3: Result**

Hip joint examination	SLR test became 70 degree in right leg. Numbness subsided completely.
Muscle strength	manual muscle test was done in both lower limbs and it was 5/5 at the level of extensors, abductors and external rotator muscles of hip region.
Dynamic reassessment	there was significant increase in walking ability
Biochemical reassessment	there was no substantial change found in the values like Hb%, TLC, DC, ESR, FBS, PPBS after 15 days of treatment

## Reassessment of symptoms

- For numbness the reduction percentage was 89.7

- For walking time, the reduction percentage was 64
- For tingling sensation, the reduction percentage was 91.3
- For low back pain reduction percentage was 94.5
- For SLR reduction percentage was 89.4
- For EHL reduction percentage was 54.5

## DISCUSSION

Vata vyadhi is caused either by dhatu kshaya or marga avaroda. Gridhrasi one among the vataja nanathmaja vyadhi causes lakshanas such as sthamba(stiffness), ruk (pricking pain) and toda (repeated twitching) starting from low back. Spondylolisthesis can be compared with gridhrasi considering the similarity in symptoms such as stiffness, pricking pain, repeated twitching and low back pain<sup>4</sup>.

The medication and treatment have been selected considering the signs and symptoms exhibited by the patient and also the dosha predominance. Bhadradarvadi kashaya was the drug of choice mainly because of its vatahara property<sup>5</sup>. It contains dasamoola which is known for its deepana, shopha and tridosahara properties. Mahat or brihat panchamoola possesses kapha-vatahara properties and laghu panchamoola is pitta-vatahara<sup>6</sup>. Simhanada guggulu is effective in reducing inflammation and reducing the pain. Haritaki, vibhitaki and amalaki the renowned triphala along with its anti-inflammatory properties, it has antioxidant, anti-neoplastic activities as well<sup>7,8</sup>. Snehanam brings about metabolic changes and stimulate vasodilatation thus increasing the blood circulation. Swedana removes stambha (stiffness), gourava (heaviness), sheeta (coldness) from the body<sup>9</sup>. By fomentation muscle spasm is relieved by increased circulation due to vaso-dilatation effect and relaxes the muscle tension. Basti is desirable for diseases caused by dosas of vata predominance or vata alone<sup>10</sup>. Sahacharadi taila matra vasti was given considering the condition of the patient and the taila possessing the properties of alleviating vata dosa and thus reducing pain<sup>11</sup>. Matra basti was advised because of vata predominance in this condition and it can also be done without any strict regimental stipulations<sup>12</sup>. Basti dravya gets absorbed through rectal mucosa and enters circulation and along with specific property of the tailam, vasti controls the inflammation. It also strengthens the surrounding muscles and alleviates pain.

## CONCLUSION

The patient with lumbar spondylolisthesis was managed very well with internal medicines and matra basti. The patient got relieved of pain, numbness and the general conditions improved. The present case report substantiates the effectiveness of ayurvedic management of spondylolisthesis. The improvement was remarkable and worth documenting.

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