

## **Research Paper**

## **MEDICAL SCIENCE**

# Management of Low Backache With Ayurveda – A Case Study

Dr. Ashok Kumar Madan Singh Assistant Profesor, Department of Roga Nidana evem Vikriti Vigyana, Chaudhary Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, Najafgarh, New Delhi 110073

Dr. Anup Jain

Clinical Registrar, Department of Panchkarma, Chaudhary Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, Najafgarh, New Delhi – 110073

## **ABSTRACT**

A 54 year old male patient with severe Low back pain with radiculaopathy to both legs, difficulty in walking and stiffness was treated with Panchkarma therapies. Patient presented with severe pain in lower back and difficulty in walking without support. Gait was limping and unstable with tingling and numbness in both lower extremities. SLR was 30° on

right leg and 45° on left leg. Management was done with various Panchkarma therapies over 17 days. Ayurveda explains this disease as Katigata vata under Vatavyadhi. Snehana and svedana formed the first line of treatment to pacify the vitiated vata while snehadhara worked as balya for mansa-asthi dhatu. SLR improved to 60° on Right leg and 80° on left leg. Also there was significant improvement in gait as patient started walking without support and limp.

## KEYWORDS: Low back pain, PIVD, Panchakarma, Patrapindasveda, Snehadhara

#### INTRODUCTION

Like a modern skyscraper, the human spine defies gravity, and defines us as vertical bipeds. It forms the infrastructure of a biological machine that anchors the kinetic chain and transfers biomechanical forces into coordinated functional activities. The spine acts as a conduit for precious neural structures and possesses the physiological capacity to act as a crane for lifting and a crankshaft for walking[1].

Subjected to aging, the spine adjusts to the wear and tear of gravity and biomechanical loading through compensatory structural and neurochemical changes, some of which can be maladaptive and cause pain, functional disability, and altered neurophysiologic circuitry. Some compensatory reactions are benign; however, some are destructive and interfere with the organism's capacity to function and cope. Spinal pain is multifaceted, involving structural, biomechanical, biochemical, medical, and psychosocial influences that result in dilemmas of such complexity that treatment is often difficult or ineffective[2].

Low back pain is neither a disease nor a diagnostic entity of any sort. The term refers to pain of variable duration in an area of the anatomy afflicted so often that it is has become a paradigm of responses to external and internal stimuli—for example, "Oh, my aching back" is an expression used to mean that a person is troubled. The incidence and prevalence of low back pain are roughly the same the world over — wherever epidemiological data have been gathered or estimates made — but such pain ranks high (often first) as a cause of disability and inability to work, as an interference with the quality of life, and as a reason for medical consultation. In many instances, however, the cause is obscure, and only in a minority of cases does a direct link to some defined organic disease exist[3].

Low back pain (LBP) is defined as chronic after 3 months because most normal connective tissues heal within 6-12 weeks, unless pathoanatomic instability persists. A slower rate of tissue repair in the relatively avascular intervertebral disk may impair the resolution of some persistent painful cases of chronic LBP (cLBP). An estimated 15-20% develop protracted pain, and approximately 2-8% have chronic pain. Of those individuals who remain disabled for more than 6 months, fewer than half return to work, and after 2 years of LBP disability, a return to work is even more unlikely[4].

The origin of Low back pain (LBP) derives from a pathology localized in the spine, as in the case of degenerative lesion, neoplastic lesion, infections, fractures, metabolic diseases like osteoporosis, or more rarely rheumatologic diseases. The causes of extra vertebral LBP may be renal, pancreatic, gastrointestinal, or of the female genital system.

The cause is often unknown; the risk is increased in overweight individuals. Disc disease is most likely to occur at the L4-L5 or L5-S1 levels[5].

Low back pain that lasts at least one day and limits activity is a common complaint. The diagnosis starts with a careful examination, followed by consideration for neuroimaging studies and electro diagnostic studies. Examination of back is completed by assessing straight leg raising (SLR) and strength, sensation and reflex activity in legs[6].

Specific management decisions are based on the duration of the symptoms and the presence or absence of neurological deficits. The classical text of Ayurveda explains these symptoms under the heading of vatavyadhi[7].

Katigatvata is the condition which causes katishoola. Kati refers to low back and shoola refers to pain.

## **CASE REPORT:**

A 54 years old Male patient from Faridabad, Haryana visited the OPD of Ch. Brahm Prakash Ayurved Charak Sansthan, Khera Dabar, Najafgarh, New Delhi on 17th May 2016 with following details:

### Patient name: ABC

Age and sex: 54 years Male

## **Built: Medium**

- Date of first visit: 17 May 2016
- 2. OPD & IPD No. 47838/2956
- 3. Address: Faridabad, Haryana

### **Chief complaints:**

- 1) Pain in low back
- 2) Difficulty in walking
- 3) Stiffness in back and legs
- 4) Limping while walking

## H/O present illness:

Patient was asymptomatic four years ago. Gradually he developed pain in his lower back radiating to both legs, with no history of any injury and associated with tingling and numbness. There was also stiffness in lower back and thighs with increasing difficulty in walking and leading to limping. He took treatment for these locally but without any relief. On taking opinions of specialists in various hospitals he was advised to undergo laminectomy which he wanted to avoid and came to our hospital's OPD.

#### Past history:

Normo-tensive, Non-diabetic patient with no history of any injury

## On examination clinical findings:

The straight leg raising(SLR) test was 30° on right leg and 45° on left leg. Patient was unable to walk without support that too with limp.

#### Radiological investigations:

MRI scan of Lumbar spine was suggestive of generalized changes of lumbar spondylosis with degenerative disc disease and multi-level disc bulges at L2-L3, L3-L4 and L4-L5 causing focal canal stenosis at these levels more at L4- L5 causing significant compression over the-cal sac with contained nerve roots.

All other routine investigations were in normal limits.

## **Modern Diagnosis**

The patient is a pre-diagnosed case of PIVD.

## **Ayurvedic diagnosis:**

On the basis of clinical presentation patient was diagnosed as a case of Vatavyadhi – katigatvata.

### Date of admission: 17/05/2016 to 04/06/2016

Treatment Schedule Panchkarma chikitsa:

Patrapindasveda (Sarvanga) – Sahacharadi taila + Balaguduchyadi Taila

## Snedhara (Sarvanga) – Balashvagandhadi taila + Balaguduchyadi Taila + Mahamasha Taila Shaman Chikitsa:

- 1. Yograj Guggulu 2 BD
- 2. Dashmula kvatha 40 ml BD
- 3. Vatavidhvansa rasa 2 BD

#### **Assessment criteria**

## Table 1. Criteria of assessment for low back pain [8]

S.N	Symptoms	Parameters	Gradation
1	Pricking Pain	Absent	0
		Mild	2
		Moderate	4
		Severe	6
2	Pulling Pain	Absent	0
		Mild	2
		Moderate	4
		Severe	6
3	Stiffness	Absent	0
		Mild	2
		Moderate	4
		Severe	6
4	Subjective Signs Tenderness At Lumbar Region	No tenderness	0
		Grade 1 Says	2
		Grade 2 Winces	4
		Grade 3 Withdraws	6
5	SLR Scoring	0	54
		10	48
		20	42
		30	36
		40	30
		50	24
		60	13
		70	12
		80	6
		90	0

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6	Pressing Power	Upto 10 Kg	3
		10-20kg	2
		20-25kg	1
		>25kg	0
	Walking speed Time taken to walk 20 meter	Upto 20 Sec	0
_		21-40 Sec	1
7		41-60 Sec	2
		>60 Sec	3
	Sensory Impairment	Present	2
8		Absent	0
	Posture	No Complaints	0
		Patient walks without difficulty but experiences difficulty from getting up from squatting.	1
		Difficulty To Squat.	2
		Difficulty In Climbing Up Stairs.	3
		Limping Gait.	4
9		Can Stand On Both Limbs But With Pain	5
		Can Stand Without Touching The Affected Limb On floor	6
		Can sit on bed without support but with pain and difficulty	7
		Lying On Bed With Pain Affected Limb Flexed By Supportive Pillows.	8

#### OBSERVATIONS

#### Table 2. Observations acc. to criteria of assessment

S. N	Symptoms		Before Treatment	After Treatment	% of Result				
1	Pricking Pain		6	2	66.7				
2	Pulling Pain		6	2	66.7				
3	Stiffness		6	0	100				
4	Tenderness At Lumbar Region		4	0	100				
_	SLR Scoring	R	36	13	63. 9				
5		L	30	6	80				
6	Pressing Power (Both Lower Limbs)		3	2	33.3				
7	Walking Speed		3	0	100				
8	Sensory Impairment		0	0	100				
9	Posture		6	2	66.7				

### DISCUSSION

The general principle of treatment of vata dosha is adopted in case of katigatvata. Snehana[9] and svedana[10] formed the first line of treatment to pacify the vitiated Vata. Taila is called as the best treatment for vatavyadhi[11]. Mansa, Majja and Rasa dhatu are majorly affected in this condition and are given strength by using Balya and Rasayana chikitsa as described below.

Sahacharadi taila[12] pacifies the Vata dosha. It possesses the characteristics of analgesic as well as anti-inflammatory activity. Furthermore, it prevents the recurrence of disease. Balaguduchyadi taila[13] is also Vataghna with Pitta and Rakta poshana qualities which help in improving the strength of muscles. Balashvagandha(lakshadi) taila[14] is Vataghna with Poshana properties thus nourishing Mansa and Majja dhatu. Mahamasha taila[15] is also having vataghna properties but is also balya and nourishing for asthi, majja and mansa dhatu.

Patrapindasveda[16] is a type of Snigdha sankara sveda which pacifies Vata and also opens the channels thereby improving circulation in the stiff muscles. Vatanulomana is also achieved by this treatment and it reduces pain. Snehadhara[17] imparts strength to all the Dhatus, improves Oja and Agni, and delays aging. It also improves motor as well as sensory system thus resulting in improved sensory as well as motor function of legs and overall improvement in the nervous system of patient.

At the end of treatment patient had improved significantly with 100% relief in major complaints and over 67% relief in all the associated symptoms.

## CONCLUSION

According to the observations in the present study, this can be safely concluded that low backache and PIVD can be compared with *katigata vata* on the basis of symptoms. The results replicate the original study and showed substantial improvement for the patient as he improved his function. (Table no. 1 and 2) Hence, the *Ayurveda* management regimen used is effective on the disease. However, further work should be done by conducting clinical trials on large samples to draw the final conclusion.

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