

Role of Panchakarma in the Management of Spinal Canal Stenosis - A Case Study

Case Report

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Abstract

Spinal canal stenosis is a painful, degenerative condition, and is localized to facets, joints, and ligamentum flavum of the vertebra which is often referred to for surgical correction. The main cause of stenosis is herniated vertebral disc. If there is no compression, the spinal canal can be referred to as narrow, but not stenotic. Certain studies have defined lumbar spinal stenosis as the narrowing of the osteo-ligamentous vertebral canal or the intervertebral foramina, which causes compression of the thecal sac or the caudal nerve roots. The narrowing may impact the entire canal or just a portion of it, but it occurs at a single vertebral level. In this condition, it may, drastically affect the quality of life due to severe pain in doing daily routine activities. In contemporary science, there is no treatment except surgical intervention which is having a high chance of complication and the chances of recurrence. Surgery is necessary when there are clinically significant motor deficiencies or symptoms of cauda equina syndrome. Based on the manifestation of clinical signs and symptoms it can be correlated with *Gridhrasi*, according to Ayurveda. *Gridhrasi* can be treated successfully by the intervention of *Panchakarma* procedures along with *Shamana Chikitsa*. Here is a case study of a patient suffering from low back pain radiating to bilateral lower limbs, stiffness, numbness, burning sensation in the bilateral sole region, and unable to walk without support, who was previously diagnosed as a case of Spinal Canal Stenosis. He was treated with a *Panchakarma* procedure, *Shamana Chikitsa* along with Physiotherapy Exercises. The patient showed marked improvement and could do daily routine activities properly.

Keywords: Lumbar canal stenosis, *Gridhrasi*, *Panchakarma*, Physiotherapy, *Basti Karma*, *Siravedhana*.

Introduction

Spinal stenosis manifests gradually with leg pain while walking. There are two distinct types of spinal stenosis: foraminal stenosis, also known as lateral stenosis, which results from compression or inflammation of the spinal nerves; and central canal stenosis, which occurs due to compression and inflammation of the spinal cord. The common cause of the disease is aging, trauma, disc bulge, spondylolisthesis, regional tumour, and arthritis of the spine. Stenosis or spinal column narrowing results in backache with restricted or painful movements of the back and walking difficulties affecting walking speed and gait. This condition develops when the spinal cord is compressed by a bone or an intervertebral disc bulge, a bony protrusion into the lumbar spinal canal, and hypertrophy of *ligamentum flavum*, and the distribution of pain in lower limbs depends on the area of stenosis(1). Previous research studies denote the

prevalence rate of lumbar canal stenosis is 5.7%(2). If conservative treatment is carried out properly but fails to relieve symptoms, surgical intervention is commonly considered an option(3).

As the symptoms of Spinal canal stenosis are somehow similar to *Gridhrasi* in *Ayurveda*, it can be correlated to *Gridhrasi*. And it is considered under *Vatananatmaja Vyadhi* According to *Ayurveda*(4). *Gridhrasi* is characterized by several key signs and symptoms, including pain (*Ruk*), pricking sensation (*Toda*), tingling sensation (*Muhuspandan*), and stiffness (*Stambha*) in the following order: *Sphik* (hip), *Kati* (lower back), *Uru* (thigh), *Janu* (knee), *Jangha* (calf), and *Pada* (foot)(5). If *Kapha* is associated with *Vata* in *Gridhrasi*, additional symptoms such as drowsiness (*Tandra*), heaviness (*Gaurav*), and anorexia (*Aruchi*) may also be present(6).

Although surgical treatment is generally well tolerated, there is a possibility of it being associated with high risks and costs. It is a challenging part for *Ayurveda* physicians to treat such cases which are already suggested for surgical treatment. Here is a male patient who was previously diagnosed with an acute case of Lumbar canal stenosis and was advised for surgery. But due to Economical condition and high-risk factors, the patient was denied the surgery. The patient started taking analgesics and NSAIDS, which were less

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effective in relieving pain and had limited results. Therefore, the patient decided to undergo Ayurveda treatment modalities. The patient received *Panchakarma* treatment, *Shamana Chikitsa* along with Physiotherapy Exercises. There was a marked remission in the symptoms and disability was seen in the patient.

Case report

Demographic Data of Patient is given in Table No.1

Name		XYZ
Age & Sex		46/ Male
OPD no	1 ST VISIT	22005489
IPD no	1 ST VISIT	220752
	2 ND VISIT	221637
DOA TO DOD	1 ST VISIT	14/03/2022 To 31/03/2022
DOA TO DOD	2 ND VISIT	23/05/2022 To 02/06/2022
Occupation		Rickshaw driver

Chief complaints

- Lower back pain radiating to both lower limbs since 2 weeks
- Stiffness & Numbness in lower limb since 2 weeks
- Burning pain in the sole region since 2 weeks
- Unable to walk without support since 2 weeks

Past History

- No history of trauma or fall, No history of major medical illness (e.g., HTN/DM/bronchial asthma/dengue), No surgical intervention.
- Repetitive jerk to the low back region while driving an auto-rickshaw for a long distance.

Present illness

A male patient, aged 46, who had been experiencing acute low back pain for two weeks, sought medical attention from a specialist after being referred by his primary care physician. The patient was diagnosed with spinal canal stenosis. The patient's main aim was to alleviate the pain so that it does not interfere with his ability to perform his job. Additionally, the patient had been taking modern medicine for two weeks to manage his low back pain but did not experience satisfactory relief. The symptoms of stiffness and pain gradually increased daily, and the condition was aggravated by certain factors such as sitting and standing for prolonged periods and there was an increase in the intensity of symptoms since last week. So, he approached Panchakarma OPD, PARUL AYURVED HOSPITAL, VADODARA, GUJARAT, INDIA for *Ayurvedic* treatment, and all his previous medicines were advised to stop and *Ayurvedic* management with *Panchakarma* Procedure and *Shamana Chikitsa* along with Physiotherapy Exercise was prescribed to him.

Personal History

- Diet: Mixed, Rooksha (dry property), Sheetahar (cold property diet) katuahara (spicy food).
- Appetite: low
- Sleep: Disturbed due to pain
- Bowel: irregular occasional constipation
- Micturition: Normal
- Addiction: no specific addiction

Examination

General Examination

- The general condition of the patient was good
- No pallor seen
- Pulse-73/min
- BP: 116/74mm of hg
- CVS: S1, S2 Normal
- CNS: Conscious and well oriented
- RS: AE-BE clear
- P/A: Soft, non-tender

Local Examination

- No local swelling, or muscle wasting,
- No change was seen in the curvature of the spine.
- No bowel bladder incontinence was reported.
- Numbness, Stiffness, and weakness of muscles of the lower limb were found.

Clinical Examination

Clinical examination of patient is given in Table No.2

Clinical Examination		1 st visit	2 nd visit
SLR	Right	on 1 st visit unable to perform (Patient came in OPD on wheelchair & due to severe pain he was unable to perform active and passive SLR)	35
	Left		45
Fabber's test			+VE
Femoral Stretch		-VE	
VAS Scale		8	6
Owestry low back pain disability Index		52	46

Ashta Vidha Pariksha

- *Nadi* (pulse)-*Vata Pitta*
- *Mala* (bowel habits)-occasionally hard
- *Mutra* (urine)-NAD
- *Jivha* (tongue)-Mild coated
- *Shabdham* (voice of patient)-NAD
- *Sparsham* (touch) - *Samshitoshna* (temperate)
- *Druka* (eye & vision) – NAD
- *Akriti*(body built)-*Madhyama* (medium)

Investigations

MRI

Diffuse posterior herniation of L4-L5 intervertebral disc is noted with central protrusion causing severe spinal canal stenosis with resultant severe compression of bilateral traversing and exiting nerve roots and clumping of the rest of the intrathecal nerve roots. Minimal posterior herniation of L1-L2, L2-L3, and L3-L4 intervertebral disc is noted with minimal

compression of bilateral traversing and exiting nerve roots.

Samprati Ghatak (7)

- *Dosha- Vata-Kaphaj*
- *Dushya- Rasa, Rakta, Kandara, Snayu, Sira, Mamsa, Meda, Sira*
- *Srotas-Rasavaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha, Sanjavaha Srotas*
- *Srotodushti- Sanga*
- *Udhbhava sthana:- Pakwashaya*
- *Vyakta Sthana- katipradesha to ubhaya pada*
- *Vyadhi-Vata-Kaphaja Gridhrasi*

Diagnosis

The patient was pre-diagnosed with Spinal Canal Stenosis and suffering from low back pain radiating to bilateral lower limbs, stiffness, numbness, burning sensation in the bilateral sole region, and unable to walk

without support, These symptoms can be compared with symptoms of *Gridhrasi* as *Stambha, Ruka, Toda,* and *Spandana* are the manifestation of *Gridhrasi*.

Assessment Criteria

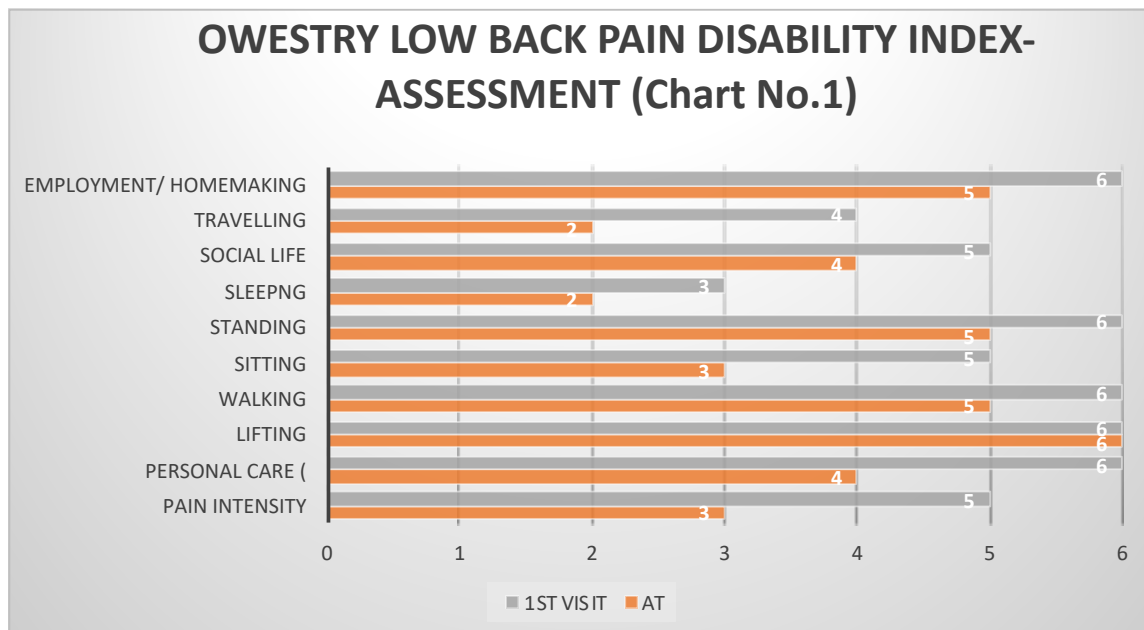
- Oswestry low back pain disability Index(Describe in Table No.3 & Chart No.1) - The Oswestry Low Back Pain Disability Index employs a scoring system for various attributes, with a total score range of 0 to 60. Prior to the treatment, the assessment was conducted during the first visit and yielded a score of 52. Following the treatment, which occurred after completion of treatment of the second visit, the score improved to 39. This indicates a reduction in disability associated with low back pain after the treatment
- VAS score
- SLR

Table No.3: Oswestry low back pain disability index (8)

		Score	BT (1 ST Visit)	AT (After 2 ND Visit)
Pain intensity	I can tolerate the pain I have without having to use painkillers	1		
	The pain is bad but I manage without taking painkillers	2		
	Painkillers give complete relief from pain	3		✓
	Painkillers give moderate relief from pain	4		
	Painkillers give very little relief from pain	5	✓	
	Painkillers do not affect the pain and I do not use them	6		
Personal care (e.g., Washing, Dressing)	I can look after myself normally without causing extra pain	1		
	I can look after myself normally but it causes extra pain	2		
	It is painful to look after myself and I am slow and careful	3		
	I need some help but manage most of my personal care	4		✓
	I need help every day in most aspects of self-care	5		
	I do not get dressed, I was with difficulty and stay in bed	6	✓	
Lifting	I can lift heavy weights without extra pain	1		
	I can lift heavy weights but it gives extra pain	2		
	Pain prevents me from lifting heavy weights off the floor, but I can manage if they are conveniently positioned, i.e. on a table	3		
	Pain prevents me from lifting heavy weights, but I can manage light to medium weights if they are conveniently positioned	4		
	I can lift very light weights	5		
	I cannot lift or carry anything at all	6	✓	✓
Walking	Pain does not prevent me from walking any distance	1		
	Pain prevents me from walking more than one mile	2		
	Pain prevents me from walking more than ½ mile	3		
	Pain prevents me from walking more than ¼ mile	4		
	I can only walk using a stick or crutches	5		✓
	I am in bed most of the time and must crawl to the toilet	6	✓	
Sitting	I can sit in any chair as long as I like	1		
	I can only sit in my favourite chair as long as I like	2		
	Pain prevents me from sitting for more than one hour	3		✓
	Pain prevents me from sitting more than ½ hour	4		
	Pain prevents me from sitting for more than 10 minutes	5	✓	
	Pain prevents me from sitting at all	6		
Standing	I can stand as long as I want without extra pain	1		
	I can stand as long as I want but it gives me extra pain	2		
	Pain prevents me from standing for more than one hour	3		

Anjali G et al., Role of Panchakarma in the Management of Spinal Canal Stenosis - A Case Study

	Pain prevents me from standing for more than 30 minutes	4		
	Pain prevents me from standing for more than 10 minutes	5		✓
	Pain prevents me from standing at all	6	✓	
Sleeping	Pain does not prevent me from sleeping well	1		
	I can sleep well only by using medication	2		✓
	Even when I take medication, I have less than 6 hrs of sleep	3	✓	
	Even when I take medication, I have less than 4 hrs of sleep	4		
	Even when I take medication, I have less than 2 hrs of sleep	5		
	Pain prevents me from sleeping at all	6		
Social Life	My social life is normal and gives me no extra pain	1		
	My social life is normal but increases the degree of pain	2		
	Pain has no significant effect on my social life apart from limiting my more energetic interests, i.e. dancing, etc.	3		
	Pain has restricted my social life and I do not go out as often	4		✓
	Pain has restricted my social life to my home	5	✓	
	I have no social life because of the pain	6		
Travelling	I can travel anywhere without extra pain	1		
	I can travel anywhere but it gives me extra pain	2		✓
	Pain is bad, but I manage journeys over 2 hours	3		
	Pain restricts me to journeys of less than 1 hour	4	✓	
	Pain restricts me to short necessary journeys under 30 minutes	5		
	Pain prevents me from traveling except to the doctor or hospital	6		
Employment / Home making	My normal homemaking/ job activities do not cause pain.	1		
	My normal homemaking/ job activities increase my pain, but I can still perform all that is required of me.	2		
	I can perform most of my homemaking/ job duties, but pain prevents me from performing more physically stressful activities (e.g., lifting, vacuuming)	3		
	Pain prevents me from doing anything but light duties.	4		
	Pain prevents me from doing even light duties.	5		✓
	Pain prevents me from performing any job or homemaking chores.	6	✓	
		60 (total score of index)	52 (total score of before starting the treatment on 1 st visit)	39 (total score of after the treatment on 2 nd visit)



Treatment plan

Table No.4 presents an overview of the treatment plan associated with Shaman Chikitsa, while Table No.5 outlines the specific procedures involved in Panchakarma.

SHAMAN CHIKITSA (Table No.4)		
Medicine	Dose	Time
1st VISIT		
<i>Yogaraj guggulu</i>	2 bd a/f	14/03/2022 to 31/03/2022
<i>Tab shallaki</i>	1 bd a/f	14/03/2022 to 31/03/2022
<i>Cap palsineuron</i>	2 bd a/f	18/03/2022 to 31/03/2022
<i>Erandamoola kashaya + rasna saptaka kashaya</i>	80ml bd b/f	14/03/2022 to 31/03/2022
2ND VISIT		
<i>Trayodashanga guggulu</i>	2 bd a/f	23/05/2022 to 2/06/2022
<i>Cap palsineuron</i>	1 bd a/f	23/05/2022 to 2/06/2022
<i>Panchatikta kashaya + rasna saptak kashaya</i>	80ml bd b/f	23/05/2022 to 2/06/2022
<i>Cap ksheerabala</i>	2 bd a/f	23/05/2022 to 2/06/2022

PANCHAKARMA CHIKITSA (Table No.5)	
1ST VISIT	
Medicine	1 st visit
<i>Sarvanga Udavartana with yavachurna, triphala churna f/b parisheka with dashmoola kashaya</i>	15/03/2022 to 17/03/2022
<i>Nitya virechana with eranda taila for 4 days</i>	14/03/2022 to 17/03/2022
<i>Sthanik lepa with doshaghna churna was done at Katipradesha and ubhaya Janusandhi</i>	14/03/2022 to 17/03/2022
<i>Siravedhana karma was done at 4 angula above the ubhaya Janusandhi</i>	On 16/03/2022
<i>Sarvanga abhyanga with dashmula taila followed by pps</i>	18/03/2022 to 26/03/2022
<i>Sarvanga abhyanga with dashmula taila followed by spps</i>	27/03/2022 to 30/03/2022
<i>Katibasti with Dashmoola taila</i>	18/03/2022 to 30/03/2022
<i>Erandamooladi shodhana basti in kala basti krama</i> Ingredients: Anuvasana basti: <i>Dhanwantara taila (40ml) + Panchatikta Ghrita (30ml)</i> Niruha basti: <i>Madhu -80ml</i> <i>Saindhava- 10gm</i> <i>Sneha- Dhanwantara taila (30ml) + Panchatikta Ghrita (30ml)</i> <i>Kalka- Putiyavani</i> <i>Kashaya- Erandamoola Kashaya (250ml)</i> <i>Avapa – Go mutra(50ml)</i>	18/03/2022 to 26/03/2022
Physiotherapy	15/03/2022to30/03/2022
2ND VISIT	
<i>Sarvanga Udavartana yavachurna, Triphala churna f/b parisheka with dashmoola kashaya</i>	23/5/2022 to 25/5/2022
<i>Nitya virechana with eranda taila</i>	23/5/2022 to 25/5/2022
<i>Sarvanga abhyanga with Dashmoola taila f/b PPS</i>	26/5/2022 to 29/5/2022
<i>Sarvanga abhyanga with Dashmoola taila f/b SSPS</i>	30/5/2022 to 02/6/2022
<i>Panchatikta ksheera basti Yoga Basti Krama</i> Anuvasana basti: <i>Sahacharadi taila (30ml) + Panchatikta Ghrita (30ml)</i> Niruha Basti: <i>Madhu -100ml</i> <i>Saindhava- 10gm</i> <i>Sneha- Sahacharadi taila (60ml) + Panchatikta Ghrita (40ml)</i> <i>Kalka- Guduchi, Yashtimadhu, Patola, Madanaphala, Nimba, Shatpushpa, Vasa (30gm)</i> <i>Kashaya- Panchatikta Ksheerapaka (300ml)</i>	26/5/2022 to 02/6/2022
<i>Katibasti with Dashmoola Taila</i>	26/5/2022 to 02/6/2022
Physiotherapy	23/5/2022 to 02/6/2022

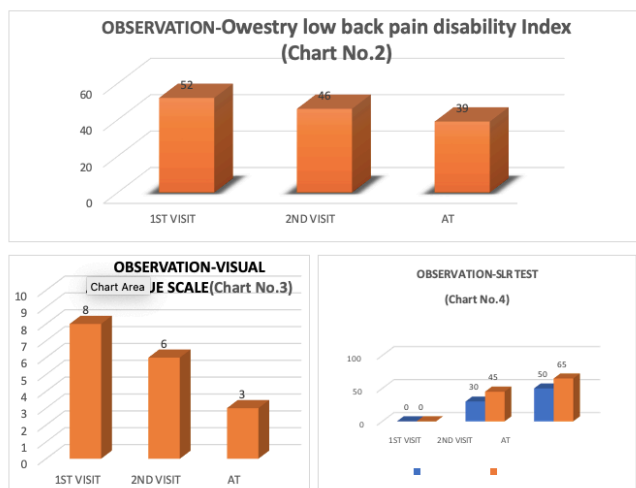
Observation

A comparison between the results of a clinical examination conducted before and after treatment, highlighting the changes or improvements observed as a result of the treatment provides in Table No.6.

Table 6: Observation

		BT		AT
		1 st visit	2 nd visit	
SLR	Right	on 1 st visit unable to perform (Patient came in OPD on wheelchair & due to severe pain he was unable to perform active and passive SLR)	35	50
	Left		45	65
VAS SCALE		8	6	3
Owestry low back pain disability Index		52	46	39

Chart No. 2 displays a comparison of the Owestry low back pain disability index before and after treatment, showcasing the changes or improvements observed in this index. Chart No. 3 presents the results of the visual analog scale (VAS) before and after treatment, indicating any changes in pain perception. Lastly, Chart No. 4 illustrates the outcomes of the straight leg raise (SLR) test before and after treatment, demonstrating any improvements in leg flexibility or pain reduction.



Discussion

In the present case, the patient reported a reduction of 70% in signs and symptoms within two visits of Ayurvedic treatment protocol. *Gridhrasi* is classified into two types: *Vataja Gridhrasi* and *Vata-kaphaja Gridhrasi*. For *Vataja Gridhrasi*, treatment usually involves *Snehana*, *Snigdha Virechana*, *Swedana*, and *Basti karma*. On the other hand, for *Vata-kaphaja Gridhrasi*, the treatment typically starts with *Rukshana*, *Snehana*, *Virechana*, *Bastikarma*, and *Siravedhana*. In the present case, the treatment protocol followed was as mentioned below.

Rukhsana Karma (9),(10): The patient was diagnosed with *Vata-kaphaja Gridhrasi*, and as part of the initial

treatment protocol, *Rukshana Karma* was administered through *Udavartana karma* and *Parisheka*. *Udvaratana* is typically used to treat conditions such as *Gauravata*, *Shula*, and *Aamaja*. *Yava Churna* and *Triphala Churna* were selected for *Udvaratana* due to their properties like *Kashaya rasa*, *Ruksha Guna*, *Tridosha Shamaka*, *Twachya*, *Medohara*, and *Deepaniya*. *Parisheka* with *Dashamoola Kashaya* is recommended for both *Pitta Kaphaja* and *Pitta Vataja* disorders, as well as for symptoms like *Shotha*, *Shoola*, *Daha*, *Gauravata*, and *Sthamba*. *Dashamoola Parisheka Sveda* was chosen as a *Ruksha Drava Sveda*, as it has properties like *Laghu Guna*, *Tridosha Shamaka*, and it can also help alleviate burning sensations in the bilateral sole region.

Nitya Virechana (11): The patient was experiencing reduced appetite and heaviness, so a daily dose of 30 ml of *Eranda Taila* with *Ushna Jala* was administered for *Nitya Virechana* on an empty stomach. *Virechana Karma* promotes *Vata anulomana* and *Agnideepana*, and eliminates morbid *Pitta Dosha* from the body. *Eranda Taila* was chosen for the purpose of *Nitya Virechana* due to its *Sukshma Guna* and *Ushna Virya* properties, which help eliminate morbid *Doshas* from the *Sukshma Srotas* of the body and act as *Deepana*, thereby increasing digestive fire (*Jataragni*).

Siravedhana(12)(13): Due to the increased severity of pain, the patient opted for *Siravedhana karma* treatment. *Siravedha* is a treatment method that aims to remove the accumulation of vitiated *Doshas* caused by inflammatory reactions, providing relief from pain. This treatment involves the elimination of *Doshas* from *Shakha*, and it is not necessary to bring the *Doshas* in *Koshtha*.

Pinda Sweda(14)(15): *Patra pinda sweda* is *snigdha ruksha swedana* is an external procedure of the *Panchakarma* treatment, which is designed to increase muscle strength and alleviate muscle spasms. This method involves the use of *sweda janana* leaves and medicated oil that pacifies *vata dosha* without increasing *kapha dosha*, due to its *snigdha* and *ruksha guna*. It has a positive effect on the nerves and promotes muscle relaxation, which may help reduce nerve compression, subsequently leading to a reduction in radiating pain and numbness. *Shastika shali pinda sweda* is a type of *snigdha sweda* treatment where the *Shali shastika* is used to provide strength to the muscles. This treatment promotes increasing blood flow, which can help to improve range of motion. The *Shali shastika* content is absorbed during the treatment.

Katibasti (16): *Kati Basti* is a treatment modality that provides both *Snehana* and *Svedana* simultaneously. It offers an alternative method of administering drug properties directly to the target area via the skin. Through *Sweda*, sweat is increased, which helps to eliminate *Maladravya* along with sweat. *Snehana* provides a therapeutic effect of *Snigdhatata* and *Brimhana*, which reduces *Kleda* in the body. This reduction in *Kleda* ultimately leads to a decrease in symptoms such as *Stabdhdhata* and *Gaurava*, which are

common in *Vata Vyadhi*. *Dashmula taila* is an oil that contains *Vatashamaka* ingredients and is known to be effective against all types of *Vata* disorders. It is particularly effective in treating pain and numbness due to its sesame oil base.

Erandamooladi Sodhana Basti (17)(18): *Basti* is considered to be the most effective treatment for *Vata dosha*, as *Vata* is the primary cause of *Sankocha*, which includes spinal canal stenosis as one of its manifestations. Degenerative changes resulting in disc bulge are a sign of increased *Vata* in the body. Therefore, *Basti* is considered the most effective therapy for such conditions. The *Erandamooladi Niruha Basti* is specifically indicated for conditions such as pain in the low back, thigh, and feet, and for the correction of vitiated *Vata*.

Panchatikta Ksheerabasti (19): *Tikta Ksheera Basti* is an enema therapy that has been used in Ayurveda for treating bone-related disorders. It is believed to have the ability to repair bone degeneration. The choice of a *Tikta Dravya Siddha Basti* for *Tikta Ksheera Basti* therapy was specifically made due to the involvement of *Asthi Dhatu* (bone tissue). The ingredients used in *Panchatikta Kshira Basti* are predominantly *Tikta Rasa*, which is related to the *Vayu* and *Akasha Mahabhuta*. Therefore, it is believed to have a similarity to the body's *Asthi dhatu* (bone tissue). Additionally, *Tikta rasa* drugs have properties that can potentially benefit the bones, such as *Vataghna* (relieving *Vata*) and *Rasayana* (rejuvenating) properties.

Internal medications were administered according to the condition of the patient.

Shamana chikitsa

Cap Palsineuron contains a combination of *Ekgangavira Ras*, *Mahavatavidhvamsa Ras*, *Sameera Pannag Ras*, and *sutasekhara Ras*, which all are directly indicated in *Vata Vyadhis*.(20) Due to this special combination, it is administered in patients having symptoms like stiffness and weakness.

Yogaraja Guggulu is composed of several key ingredients including *Chitrak*, *Pippalimula*, *Yavani*, *Krishna jirak*, *Vidanga*, *Ajamoda*, *Jirak (Shweta Jirak)*, *Devdaaru*, *Chavya*, *Ela*, *Sandhav*, *Kushtha*, *Rasna*, *Gokshur*, *Dhanyak*, *Haritaki*, *Bibhitaki*, *Amalaki*, *Musta*, *Shunth*, *Marich*, *Pippali*, *Twak*, *Ushir*, *Yavakshar*, *Talishpatra*, *Tejapatra*, *Shuddha Guggul*, and *Ghee*(21). The primary constituents of *Yogaraja Guggulu* possess characteristics like *tikta*, *kashaya*, *katu rasa* and *ushna*, *ruksha guna*, *ushna virya*. These properties make it effective in balancing *Kapha* and *Vata doshas*. *Yogaraja Guggulu's* main therapeutic actions are associated with pain relief and anti-inflammatory effects, primarily due to the presence of *Guggulu* as a major ingredient. Furthermore, extracts from this formulation have displayed cytotoxic activity against brine shrimp, indicating the presence of potent and active components (22). *Yogaraj guggulu* has *Rasayana* (rejuvenation) as well as alleviates the three *doshas*. And hence indicated in all the *Vata rogas*(23).

Trayodasanga Guggulu is an Ayurvedic formulation of 13 herbs, including *Guggulu*, that has been prepared in *ghee*. Constituents such as *Satavari*, *Ashwagandha*, and *Guduci* are rejuvenators that strengthen *Dhatu*. *Sunthi* and *Ajamoda* is booster of *Jatharagni*, whereas *Babula* focuses on *Asthidhatvagni* and thus maintains the integrity of bone and joints(24).

Dashmoola and *Rasnasaptaka kashaya* can be used to address problems with the nerves, bones, muscles, and joints. *Dashmoola* has potent anti-inflammatory and antioxidant properties(25). The main ingredients of *Rasnasaptaka kashaya* are *Rasna*, *Guduchi*, *Gokshura*, *Eranda*, *Punarnava*, *Aragwadha*, and *Devadaru*. *Rasna* has been described as the best *Vatahara* (capable of alleviating *vata*) drug in Ayurvedic classics. *Doshaghna Churna* consists barks of *poonarnava*, *devadaru*, *sunthi*, *sidharth* and *sigru*(26). And these drugs possess *kapha-vatahara* properties.

Shallaki have a *Guna* of being *Laghu* and *Ruksha*. In terms of *Rasa*, they encompass *Kashaya*, *Tikta*, and *Madhura*. Their *Vipaka* is *Katu* and they exert a *Sheeta Veerya*. Furthermore, *Shallaki* tablets have the property of being *Doshaghna*, which help balance and alleviate imbalances in both *Kapha* and *Pitta doshas*(27). *Shallaki* herb provides strength to joints, relieves joint pain, diminish swelling, increases mobility and pacify *dosha* which is responsible for joint disease(28). The *Ksheerabala* capsule has *Vatapittahara* properties, which means it can alleviate the burning sensation caused by *Pitta dosha* and reduce the *Pittaja* (originating from *Pitta*) symptoms.

Physiotherapy

In the present case, it provided pain relief in the soft tissues such as in ligaments, tendons as well as muscles. Hence it helps in restoring the lumbar spine and in improving its mobility. It can be considered as a supportive treatment which helped in rapid recovery of the symptoms in the patient.

After all the treatment patient show great improvement in his health about 75% of pain and stiffness reduced. Now he can do all his routine activities properly.

Conclusion

In the current case, positive result was achieved by using a combination of *panchakarma* therapy, internal medicine (*Shamanausadhi*), and physiotherapy exercises. In this case, the patient underwent *Panchakarma* treatments during the acute stage, resulting in significant improvement in their symptoms. Upon admission to the IPD, the patient was unable to stand or walk without support. However, following treatment, the patient was able to walk with support. The patient experienced a significant enhancement in their quality of life.

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