



CASE STUDY

OPEN ACCESS

A Case Study on Ayurvedic Management of Lumbar Spinal Stenosis

Nitin Kumar M Vala, Dattu N. Bandapalle, Yesha Kacha

Department of Rachana Sharir, Parul Institute of Ayurveda, (PIA) Limda, Vadodara, India

Corresponding Author: Yesha Kacha

Email Id. -: nitinvala21@gmail.com

ABSTRACT

The spinal canal narrows in lumbar spinal stenosis, squeezing the nerves that go through the lower back and into the legs. Modern treatment may recommend a surgical procedure such as a decompression laminectomy. The results of Ayurvedic treatment in such conditions are reported in this study. A 56-year-old male Worker went to the Outdoor Patient (OPD) complaining of numbness in both feet and weakness in both lower limbs. He had Ayurvedic therapy from this facility twice over the previous three years, experienced great alleviation, and is now being hospitalized for a third round. The presentation of Pangu, which was discussed under vata vyadhi, may be taken into consideration in this case. Canal stenosis is seen to benefit with ayurvedic therapy.

Keywords - Lumbar stenosis, Pangu, Rasayana, Sodhana, Vata Vyadhi.

Received 21.03.2024

Revised 29.04.2024

Accepted 21.05.2024

INTRODUCTION

Using Ayurveda Gridhrasi can be mostly linked with intervertebral disc prolapse or canal stenosis, However, in this instance, peroneal neuropathy is also present, and the patient experienced weakness and foot drop when walking [1]. In addition to vata hara techniques such as initial rookshana, snehana, swedana, vasthi, brimhana, and rasayana, management includes internal samana and sodhana medicines. This case study describes how the Vatavyadhi principle was used to successfully treat lumbar spinal stenosis [2, 3]. The majority of cases of spinal stenosis in adults are those over 55. A medical history, physical examination, and imaging scans are used to diagnose it [4, 5].

CASE STUDY

A fifty six (56) years old male worker who was experiencing numbness in both feet and weakness in both lower limbs reported to the Outdoor Patient (OPD). The concerns first surfaced five years ago as low back discomfort and both lower extremities below the knee numbness. His problems worsened with time, and within six months, he experienced muscular atrophy and weakness in both lower limbs (Rt > Lt). His equilibrium was off, making it difficult for him to walk. He had used allopathic medication, but it had not provided him with any relief. Three years ago, he had Ayurvedic therapy, and the alleviation was mild. He had complete pain relief as well as a notable improvement in his weakness, numbness, and muscle wasting after the second round of Ayurvedic therapy last year. Walking became easier as well. He is now being treated for a minor right lower limb weakness with sole numbness. He is currently on his third round of therapy. Height (162 cm.) and weight (58 kg), the patient's BMI was 22.1 at the time of the assessment. Vitals: B.P. 130/70 mm Hg, Pulse 82/min, Respiratory rate 21/min. There was no claudication discomfort and no other noteworthy systemic abnormalities.

INVESTIGATIONS: (03/01/ 2023)

LAB INVESTIGATION-

| | |
|--------------------------------------|-------------|
| Haemoglobin (Hb%) | 13.6% gm/dl |
| Erythrocyte Sedimentation Rate (ESR) | 24 mm/hr. |
| Fasting Blood sugar | 98 mg/dl |
| Total Cholesterol | 180 mg/dl |

MRI LUMBAR SPINE [27/02/2022] -

| | |
|--|---------------|
| Posterior and Posterolateral disc prolapse | L3- L4 |
| Annular disc bulges | L4, L5-S1, S2 |

NERVE CONDUCTION STUDY

The following therapeutic signs were discovered during a general examination and assessment using ayurvedic standards.

MANAGEMENT:

The patient had three courses of Ayurvedic therapy from the hospital over two years,

TABLE -1: PAST HISTORY OF THE CASE

| Date | PAST HISTORY |
|------------|--|
| 14/06/2021 | H/o MI and on T. Aspirin 1BD at daily. |
| 18/08/2021 | Sacroiliac joint pain and numbness of both lower limbs |
| 21/03/2022 | muscle wasting, loosening muscles, imbalance. Consultant Advised surgical procedure |
| 26/07/2022 | 1 st Course of treatment -A two-month course of therapy consisting of Rukshata, Snehana-Swedana, And Basti karma; discomfort and weakness subsided and muscular strength increased. |
| 25/09/2022 | After the second course of therapy, the motor system and gait were both normal. |
| 04/01/2023 | Further admitted for the 3 rd course |

TABLE NO. 2 - ASSESSMENT OF LOCOMOTOR EXAMINATION

| | |
|--|--|
| Locomotor system | |
| Sacroiliac joint bilateral examination | |
| Palpation | Grade 1- Tenderness |
| Compression test | (+) |
| Movements | Pain (Moderate) |
| Lumbar spine | |
| Palpation, L4- L5 | Grade 1- Tenderness |
| Straight leg raising test | (+) |
| Movements | Pain (Moderate) |
| Nervous system: | |
| Motor system - muscle tone on right lower limb | Hypotonic movement |
| Muscle bulk on both lower limb | Equal |
| Muscle power - thigh and calf muscles Ankle dorsiflexors | Grade 2 - bilateral |
| Evertors | Right- Grade 1 |
| Plantar flexors | Left – Grade 3 |
| | Right- Grade 1 |
| | Left – Grade 2 |
| | Grade 3 -bilateral |
| Reflex | Reduced, knee jerk and ankle jerk (+) bilateral, |
| Coordination | No movement - walking not possible |

TABLE -3: AYURVEDIC ASSESSMENT PARAMETERS

| | |
|-------------------|---|
| Dosha | Kaphavataj Pradhana, kapha-anubandha |
| Dushya | Rasa, Mamsa, Meda, Asthi |
| Bala | Rogabala - Madhaya, Rogi bala - pravara |
| Agni | Samagni |
| Prakriti | Rajas - Vata-Pittaja, Manasika |
| Srothas | Rasa vaha Srotas, Mamsa vaha Srotas and Asthi vaha Srotas |
| Sroto-dushti type | Sanga Dusti |
| Site | Kati Sandhi |
| Sadyasadhyata | Krishta Sadhya |
| Roganirnayam | Pangu |

AUSHADHI:

- Castor oil- 8 ml
- Tab. Rasna saptaka 250 mg 1-0-1 after food
- Sahacharadi kashaya – 80 ml
- Dhanwantari taila – 5 ml with Kwatha evening
- Tab. Gandharva Haritaki – 500 mg 1 HS at bed time

TABLE- 4: TREATMENT PLAN - FIRST COURSE - FROM 26-07-2022 TO 25-09-2022

| Days | Procedure |
|-------|---|
| 1-15 | Snehana and Swedana – full body |
| 16-30 | Patrapotali Swedana with Sahacharadi taila + Kati Basti with Tila Taila |
| 1- 15 | Kala Basti + Dhanwantari taila 60 ml (Alternate) |
| 16-30 | Anuvashana Basti (alternate Day) |

TABLE -5: SECOND COURSE - FROM 25-09-2022 TO 24-11-2022

| Days | Procedure |
|-------|---|
| 1-15 | Snehana and Swedana– full body for 15 days |
| 16-30 | Body Swedana with sahacharadi taila – 15 days |
| 1-15 | Niruha Basti with Dhanwantari taila– 180 ml – 15 days (Alternate) |
| 16-30 | Kati Basti with Tila Taila- 15 days (Alternate) |

TABLE-6: THIRD COURSE -FROM 04-01-2023 TO 03-03 -2023

| Days | Procedure |
|---------|--|
| 1- 15 | Snehana and Swedana – full body for 15 days |
| 15 - 30 | Patra Pottali Swedana with Dhanwantari taila – 15 days |
| 1 - 30 | Shashtika Shali Pinda Sweda + Matra Basti with Dhanwantari taila |

DISCHARGE AUSHADHI:

- Vatanashaka Vati 2-0--2
- Ksheerabala Taila + Dhanwantri taila - massage on lower limbs
- Mahayogaraj Guggulu -2-0-2
- Vatavishwansha Rasa 2-0-2
- Dashmoola Kwath 20 ml twice a day

TABLE -7: SPINAL STENOSIS ASSESSMENT

| | Before treatment | After 1 st course | After 2 nd course | After 3 rd course |
|--------------------------------|------------------|------------------------------|------------------------------|------------------------------|
| Symptom severity score | 36 | 22 | 17 | 10 |
| Activity score | 19 | 12 | 9 | 6 |
| Treatment satisfaction score | 28 | 19 | 11 | 8 |
| Total Disability in percentage | 92.3 % | 42.66% | 32.67% | 26.78% |

DISCUSSION

The condition Pangu characterized as being within the category of vatavyadhi is taken into account in this case since the presentation was most pronounced in one lower leg [8]. The names Pakshaghata and Kaphaavritha vyana can be taken into consideration because the presentation was weak lower limbs with accompanying walking difficulties [9-10]. The first line of management is chosen based on the kaphaavarana and is Rukshana. Brimhana treatment came after the withering (sosha). Repeated sneha-sweda, like in this instance, is the course of therapy recommended in Ayurvedic texts for Vatavyadhis [11].

MODE OF ACTION OF DRUGS
MAHAYOGARAJ GUGGULU

Mahayogaraj Guggulu is used to treat chronic Vata diseases as an analgesic and anti-inflammatory, easing joint stiffness, pain, and inflammation while also supporting the musculoskeletal system. It helps regenerating tissue [12].

DASHMOOLA KWATH

The greatest nutritional syrup, Dashmoola Kwath, is made from a decoction of 10 herbal remedies that were chosen for their capacity to Balya (increase strength). [13] The qualities of the Dashmoola Kwath include Madhura Rasa, which has a sweet flavor, Guru, which is heavy, Ruksha, which is harsh, and Katu Vipaki, which is used as Tridosha Shamak and detoxifies the body while also calming irritated nerves. It also helps women recover from postpartum weakness and anxiety. [14]

ABHYANGA

Through snehana, one may foster strength, Agni, nourishment, and prana. Sarvanga Swedan, carried out by Nadi Sweda, decreases Stambh (stiffness), enhances joint mobility, and lessens stress and exhaustion by using Dashmool and Nirgundi medications [15].

SWEADANA

All of the body's microchannels can be cleaned by swedan medications [16].

KATI BASTI

Katibasti provides nourishment and lubricant to the Snayu, Sandhi, and Sira structures in the lumbar spine in patients who have a history of repeated over-standing work that destroys the ligamentum flavum and causes persistent low back pain. Bala, ksheera, and Dhanwantri oil are the main components of Ksheer Bala Taila, a remedy for Vata Vikara. It reduces inflammation and restores vata to normal [17].

SHODHANA BASTI

According to a number of publications, Shodhana Basti is one of the most effective treatments for Vataja diseases. Before being absorbed into the body and having the desired effect, the drugs administered via basti remain in the rectum and colon (Pakwashaya) [18]. As a result of these drugs' therapeutic actions, fluid and toxic substances from intra and extracellular levels are drawn into the large intestine and then evacuated from the body [19]. In this case, Ashwagandha + Ksheer Basti followed by Shodhana Basti was advised by Dhanwantri Taila. Tikta Rasa Dravya Siddha was suggested by Acharya Charaka. In addition to ghruta, ksheer basti are advised in Asthi-Majjagata Vikara. Tikta Rasa enhances Dhatwagni [20]. All Dhatus will be fed, and Asthi Majja Dhatu will remain stable, thanks to improved Dhatwagni results. Shodhana Basti by Dhanwantri Tail is absorbed and distributed throughout the body up to subtle channels as a result of its Brumhan and Pachana characteristics [21].

MAHAVATAVISHWANSHA RASA

Most herbal formulations that are used nowadays are used as antibacterial agents. Due to their extreme hardness, copper, tin, and iron have been processed into herbal metallic preparations known as Rasa for use in traditional medicine. In Ayurvedic literature, mineral-based rasa medicine is widely utilized to treat a variety of illnesses, including epilepsy, anemia, piles, and Vata dosha.²²

CONCLUSION

The Ayurvedic vata vyadhi treatment regimen of rookshana, Snehana-Swedana, Vata anulomana, Brimhana, Yapana, and Rasayana has been demonstrated to be very effective in mitigating the symptoms of lumbar canal stenosis associated with Peroneal neuropathy. The potential use of Ayurvedic principles to the treatment of complex neurological illnesses warrants further investigation.

REFERENCES

1. Srikanta Murthy K S. (2003): Ashtanga Hridaya textbook, Nidana Sthana,: Vol - II, 5th edition, chapter 15/ 45, Krishnadas academy, Varanasi pg-156.
2. Srikanta Murthy K S. (2003): Ashtanga Hridaya textbook, Sutrasthana,: Vol - II, 5th edition, chapter 5/ 46-49. Krishnadas academy, Varanasi, pg-167.
3. Srikanta Murthy K S. (1999): Ashtanga Samgraha textbook, Chikitsasthana, Vol - II, 4th edition, chapter 15/ 21, Krishnadas academy, Varanasi, pg-186.
4. Nishteswar K, Vidyanath R, (2005): Drugs useful in Panchakarma therapy, Keralaeyapanchakarma. Chapter 10. Chaukhambha Orientalia. Varanasi. Pg 81.
5. Srikanta Murthy K S. (1999): Ashtanga Hridaya textbook, Sutrasthana, Vol - I, 4th edition, chapter 19/ 67-69. Krishnadas academy, Varanasi, pg-250.
6. Sharma P. V (2000): Susrutha Samhitā textbook. Chikitsasthana. Vol II. Chapter 38/ 106-111, Chaukhambha viswabharathi publishers. Varanasi. Pg 656.
7. Nishteswar K, Vidyanath R, (2005): Drugs useful in Panchakarma therapy. Keralaeyapanchakarma. Chapter 10, Chaukhambha Orientalia. Varanasi. Pg 82
8. Shastri RD, (2010): editor. Bhaisajyaratnavali of Govind Das Sen, Ch. 26 /115-118. 20th ed. Varanasi:

- ChukhambhaPrakashan; p. 625.
9. Pravana J, Manoj Shankaranarayan, Keraliya chikitsapaddati, (2008): published by Padmasri Dr. Rajagopalan Ayurveda Granthamala Samithi. Page. no. 70.
 10. Srikanta Murthy K S. (2003): Ashtanga Hridaya, chikitsasthana, Vol - II, 5th edition, chapter 21/ 56 Krishnadas academy, Varanasi, pg-507.
 11. Sreeraman namboothiri, (2005): Chikitsamanjari [commentary]. Vol I & II, 7th edition. Vatavyadhi. 3-10. Vidyarambham publishers. Alappuzha. Pg 363.
 12. Velayudhakurup (2017): Sahasrayoga, Vaidyapriya commentary, vatavyadhi prakarana, 1st edition. Devi book stall, kodungallur, pg 141
 13. Velayudhakurup, Sahasrayoga, Vaidyapriya commentary, Taila prakarana, 1st edition. Devi book stall, kodungallur, 2017, pg 169
 14. Nishteswar K, Vidyanath R, Drugs useful in Panchakarma therapy. Keraleeya panchakarma, Chapter 10, Chaukhambha orientalia. Varanasi. 2005, Pg 83.
 15. Aswathy M, Mukesh E, Jithesh M. Ayurvedic Management of Lumbar Spinal Stenosis- A Case Report Int. J. AYUSH CaRe. 2023;7(2):137-142.
 16. Acharya Ravi Datta Shastri Charak Samhita textbook, Chikitsasthana, Vata vyadhiadhyaya, Chikitsa Sthana, Chapter 28, Verse 81, p. 702.
 17. Acharya Ravi Datta Shastri Charak Samhita textbook, Sutrasthana, Swedaadhyaya Chapter 14, Version 22, p.220.
 18. Gaurav Phull, Rekha Phull. (2018): Clinical approach to Marm Chikitsa, how does marma chikitsa work. 1st ed. Delhi: IP Innovative publication, Chapter.10, p.114.
 19. Acharya Bhavprakash, Bhavprakash Nighantu (2013): commentator by Krushna chandra Chunekar, Guduchi Adhikar version 144, Edited by Gangasahay pande, Reprint ed. Varanasi: Chaukhamba Bharati Academy. , p.448.
 20. Acharya Dhridabala, (2011): Charak Samhita textbook, Vata-vyadhiadhyaya, Chikitsa Sthana, Chapter 28, Verse 56, edited by Ravidatta Tripathi & Acharya Vidyadhar Shukla, Vol 2, Varanasi: Chaukhamba Sanskrit Pratishthan. , p. 698.
 21. Acharya Dhridabala, Charak Samhita textbook, Siddhi Sthana Prasutayogia Siddhi Adhay, Chapter 8, Version 8, p. 938.
 22. Priyanka Diliprao (2021): Khiradkar, Management of Spinal Canal Stenosis through Ayurveda - A case study, J.Res.Tradit.Med. ;7:63-67. Doi:10.5455/jrtm.2021/83118

CITATION OF THIS ARTICLE

Nitin Kumar M Vala , Dattu N. Bandapalle , Yesha Kacha. A Case Study On Ayurvedic Management Of Lumbar Spinal Stenosis. Bull. Env.Pharmacol. Life Sci., Vol 13 [7] June 2024: 07-11