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A CASE STUDY ON AYURVEDIC MANAGEMENT ON SPINAL CANAL STENOSIS (MERUDANADA KSHAYA)

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ABSTRACT

Introduction -Lumbar spinal stenosis usually is a degenerative condition, it is localized to facets, joints, ligamentum flavum of vertebra. Herniated disc is common cause of stenosis in younger generation. In this condition patient experiences maximum pain in unilateral direction, which gets aggravated with prolong standing or lumbar extension. The distribution of pain in the lower extremities is dependent on area of stenosis but feels relief while at rest. According to Ayurveda, based on resembling clinical manifestation this condition can be co-related with Grudhrasi. **Observation** -the patient's "questionnaire" score was 18 (or 70%), and after finishing the course of therapy, the patient claimed alleviation from their Sharir Shoola, Stambha, and Spandan in Shakha symptoms, with a score of 3 (or 6.5%). On "The Spinal Cord Injury questionnaire," there was a 65% improvement. Agnikarma and Kati Basti treated the patient on the tender point when the patient's right side of the limb started to suffer significantly greater agony and anguish. **Conclusion** -Due to a variety of etiological variables, men are more likely than women to experience low back pain, and in addition to patient-related causes, iatrogenic causes are on the rise. In this instance, the primary cause of the spinal canal constriction that affected the patients' everyday activities and caused them pain, combined with hard work. In the situation where surgical therapy is frequently recommended, the strategy based on Ayurvedic principles produced positive therapeutic effects.

KEYWORDS: Spinal Canal Stenosis, Ayurveda, Gradhasi etc.

INTRODUCTION

The obstruction of the canal through which spinal nerve tissues pass is referred to as canal stenosis. Stenosis refers to a blocked passage, and canal denotes a hollow passage. Before we discuss the non-surgical Ayurvedic therapy for canal stenosis, let's address your question concerning whether Ayurveda can treat canal stenosis. Let us first go through the canal stenosis in further depth.¹

SPINAL CANAL

The term "nerve roots" refers to the route that accommodates the spinal cord's neural tissue and its branches. The bones that make up the spine, the vertebrae, are hollow on the inside. Once these vertebrae are stacked on top of one another. Together, they create a canal-like structure. The Central Spinal Canal refers to this. In the body, this is oriented vertically. Nerve roots come out through a canal on each side of this canal. Lateral canal or lateral recess is this. These are Horizontal passages.²

SPINAL CANAL STENOSIS

When this passage of canal obliterates- this is known as spinal canal stenosis.

TYPES OF CANAL STENOSIS

Canal stenosis is the term for any obstruction in these channels. Since there are two different sorts of canals, this is mostly one of them. Since the human spine is connected to two canals.

1. Central Stenosis
2. Lateral Stenosis

These two states clearly vary from one another on a fundamental level. Numerous neurological indications and symptoms are brought on by the central stenosis. Stenosis will have a more extensive impact. In addition, every symptom of lateral stenosis is linked to a specific nerve root.

The main cause of central spinal stenosis is an extruded or protruded disc. Degenerative changes, osteophytes, disc bulging, and herniation can all contribute to lateral recess stenosis. Stenosis, whether central or lateral, is thus caused by a few additional disorders. Spinal stenosis can result from a variety of causes.³

Besides this as per the location of the condition is-

1. Cervical spinal stenosis
2. Lumbar spinal stenosis

These have a variety of symptoms. because various spinal regions nourish various parts of the body.

CAUSES OF SPINAL STENOSIS

The canal's obstruction is caused by a few different things. These might have both internal and external causes.

Spinal Discs.

On each level, between the bones, there are discs in the spine. These discs serve to preserve the flexibility of brain tissue and to safeguard tissue. when a disc is bulging and taking up space in the canal as a result of pressure. The most typical occurrence of this disease. Osteoarthritic modifications to the spinal bones. The human body is prone to wear and strain. Osteophytes occupy the spinal passageways when this wear and tear is causing them. The canal of the spine is affected by this. This is frequently linked to the spondylitis condition.⁴

Tumors. Stenosis is a condition when there are certain growths that form between the spinal cord and bone pathway. Increasing Ligament Thickness. This incident happens as a result of strain on the ligament brought on by a herniated or bulging disc. In addition, stenosis can result from posterior longitudinal ligament (PLL) or anterior longitudinal ligament (ALL) ossification brought on by calcium deposition. The cervical area is where this generally happens. injuries to the spine. Accidentally, bone tissue may slip into the canal and obstruct it.⁵

SYMPTOMS OF CANAL STENOSIS

Depending on where the spinal canal stenosis is, several symptoms of spinal stenosis may be present. radiating from Headache, neck, shoulder, and upper arm pain. ache that travels down the lower leg from the hip to the foot. Sciatica-like pain Upper and lower body numbness can create issues with walking and can affect the entire lower leg. bodily heaviness Stool and urine incontinence Walking while unbalanced lower back pain. In extreme situations, a swollen abdomen and bowel and urine incontinence. The signs of stenosis are not very unusual.⁶

These resemble the signs of a bulging or herniated disc. However, they are invariably hostile in nature. For instance, a typical bulging disc hurt. However, if the same disc herniates and leads to canal stenosis, the pain will be extreme; for instance, in the case of L5-S1 canal stenosis, the pain will feel like sciatica. If, however, there is a problem with the C5-C6 cervical disc, then all symptoms will be related to the cervical issue. Canal stenosis in the spinal canal can also cause numbness and other disabilities. Therefore, treatment for this stenosis issue should start right away.⁷

CANAL STENOSIS AS PER AYURVEDA

because surgery is required to treat canal stenosis. When it comes to canal stenosis, this is the cause. Each patient begins seeking for Ayurvedic therapy. so as to prevent the need for surgery. There are two ideas from the Ayurvedic school. which are relevant to this canal stenosis issue. "Khavaigunyad". According to Ayurveda, this is a diseased development. Aakash Mahabhoota is referred to as "Kha." This allows Vata Dosha room. Khavaigunyad is the term used to describe the erasure of space. In the case of this condition, the same occurs in the area between the vertebrae. As a result, we may approach this sickness considering this idea.

Dushti and Sroto. The human body is viewed by Ayurveda as a meshwork and network of channels. The body experiences specific issues when any of these channels are not continuous. No such ailment exists according to Ayurveda. because the inside of the spinal canal is not described. Everything happens as predicted by the symptoms and indicators.

The "Vata Vyadhi" is the umbrella term for all canal stenosis symptoms. As a result, Ayurveda treats this ailment in the same manner. It is crucial to examine a case study here before talking about the therapeutic aspect of Ayurveda. Dr. Sujit Kumar MD, has handled this matter thoroughly in this instance. This was make it easier for you to comprehend the reasoning behind Ayurvedic therapy for canal stenosis.⁸

CASE STUDY

A 28-year-old man with lower waist pain, right side pain, and rest on sleep position visited the OPD at the Vivek College of Ayurvedic Sciences and Hospital in Bijnor, Uttar Pradesh, complaining that the pain had gotten worse over the previous 20 days while he was working. The patient also reported feeling restless as a result of the pain.

ON EXAMINATION

General condition- good,

Palloriness – Not seen

Pulse-70 /min

BP: 130/80 mm of Hg

CVS: S1, S2 Normal

CNS: Conscious and oriented

RS: AEBE- both side clear

P/A: Softness and non-tenderness

MEDICAL HISTORY

- NO KNOW CASE OF DM/ HTN.

PERSONAL HISTORY

- Mixed Diet,
- frequency of intake-irregular
- Appetite-low

- Sleep – Disturbed
- Addiction- Smoking occasionally drinking
- Bowel-irregular occasionally constipation

ASHTAVIDHA PARIKSHA

- Nadi -PittajaVata
- Mala- Constipation
- Mutra -Prakrut
- Jivha -coated
- Shabdham – Heaviness in Voice
- Sparsham - Prakrut
- Druka – Prakrut
- Akriti-Madhyama

CLINICAL EXAMINATION

1. **SLR test**-Negative

B) **Local examination** - No swelling and no change seen in spine cord. No numbness, No Tingling Sensation reported.

INVESTIGATIONS:

Hb%-13.4 gm%

TLC-5,600 cu.mm

ESR- 22 mm/Hr

RA factor: Negative

LFT: No Abnormality seen ‘

RFT: No Abnormalityseen

Radiographic MRI investigations:

According to MRI results, there is a diffuse bulging disc with a right diffuse disc protrusion at levels L2, L3, L5, and L6 that narrows the spinal canal by 3.7 mm and crosses a nerve root. There is also a moderately diffuse bulging disc at levels L2, L3, L4, and L5 that indentates over the ventral thecal sac.

Diagnosis: Stiffness, discomfort that spreads down the right limb, and MRI results are used to diagnose spinal canal stenosis.

Assessment Criteria

The Spinal Cord Injury questionnaire for low waist pain and disability, which consists of 10 items, was chosen as the assessment criterion because it is a crucial tool for determining a patient's functional impairment and is regarded as a functional outcome instrument. Each question uses a six-point (0–5) scale to assess everyday activities such as pain level, walking, sitting, and social life. Assessment was done before and after therapy using a questionnaire.

Table: Shaman Chikitsa

Medicine	Dose	Duration
Agnitundi Vati	500mg BD, before Meal	5 days
Triphala Churna	4 gm before dinner with lukewarm water	7 days
Maha Yogaraj Guggulu	250mg 1tab TDS	15 Days
Dashmoola Kwath	20 ml BD	1 Months
Rasnadi Kwath	10 ml BD	1 Month

TABLE: PANCHKARMA INTERVENTION**Days Date Procedure**

Day 1 03/01/2022 Snehana, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda+ Ksheerabala Taila), Shodhana Basti 90ml, Physiotherapy

Day 2 04/01/2022 Snehan, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda+ Ksheerabala Taila), Shodhana Basti 90ml, Physiotherapy

Day 3 05/01/2022 Snehan, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda+ Ksheerabala Taila), Shodhana Basti 90ml, Physiotherapy

Day 4 06/01/2022 Snehan, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda+ Ksheerabala Taila), Shodhana Basti 90ml, Physiotherapy

Day 5 07/01/2022 Snehan, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda+ Ksheerabala Taila), Shodhana Basti 90ml, Physiotherapy

Day 6 08/01/2022 Snehan, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda+ Ksheerabala Taila), Shodhana Basti 90ml, Physiotherapy

Day 7 09/01/2022 Snehan, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda + Ksheerabala Taila), Shodhana Basti 90ml, Physiotherapy

Day 8 10/01/2022 to 18/01/2022 Snehan, Swedana, Agnikarma Chikitsa, Katibasti

(With Ashwanganda + Ksheerabala Taila), Shodhana Basti 180ml, Physiotherapy

DIET ADVISED:

Pathya Ahara- Mudga, Puran Shali, Shasthi Shali, Takra, Peya, Vilepi, Goghrit in diet.

Apathya Ahara - Dadhi, Junk food, bakery items, cold drinks, Pizza, Burger, Packed Food, Vinegar.

Apathya Vihar- Diwaswapna, Ratrijagran, Stressful Work

OBSERVATIONS

Prior to treatment, the patient's "questionnaire" score was 18 (or 70%), and after finishing the course of therapy, the patient claimed alleviation from their Sharir Shoola, Stambha,

and Spandan in Shakha symptoms, with a score of 3 (or 6.5%). On "The Spinal Cord Injury questionnaire," there was a 65% improvement. Agnikarma and Kati Basti treated the patient on the tender point when the patient's right side of the limb started to suffer significantly greater agony and anguish.

DISCUSSION

The symptoms present in this case are similar to those of the spinal canal stenosis disease described in Ayurveda. Spinal Canal Stenosis is a Vata vyadhi and is characterised by symptoms such as Sharir Shoola (Pain) in the Lumbo region as the origin of the Sciatic nerve, pain radiating up to the ankle region, Shoola, Stambhana, Muhuspandan in gluteal region, Lumbar region These symptoms are regarded as Dhatukshayatmak and Margavarodhjanya Vata vyadhi, and an Ayurvedic treatment plan has been used in consideration of this. Prior to Panchakarma, Deepan, and Pachana, Shaman Chikitsa began his work to treat the Sama ailment.

MODE OF ACTION OF DRUG

Mahayogaraj Guggulu is utilised as an analgesic and anti-inflammatory treatment for chronic Vata disorders, helping to reduce joint stiffness, discomfort, and inflammation while also bolstering the musculoskeletal system. Regenerating tissue is aided by it.

Dashmoola Kwath is the best nutritious syrup and comprises a decoction of 10 herbal medicines selected for their ability to Balya (raise strength). The Dashmoola Kwath's properties include Madhura Rasa (sweet flavour), Guru (heavy), Ruksha (rough), and Katu Vipaki, which is utilised as Tridosha Shamak and removes toxins from the body while also relaxing inflamed nerves. It also aids women in recuperating from postpartum anxiety and weakness.

Rasnadi Kwath is the greatest nutritious syrup and comprises 10 herbal medications that have been specifically picked for their ability to improve strength (Balya). Property of Rasnadi Kwath depicts Katu Vipaki, which is employed as Tridosha Shamak to remove toxins from the body, Madhura Rasa (sweet taste), Guru (heavy), and Ruksha (rough).

Abhyanga: According to Vedana, Sandhi Shool, and Katiprushtha Shool, Sarvanga Snehana was carried out by Ashwagandha + Ksheerabala Tail. Strength, Agni, nutrition, and Prana are all encouraged through snehana. 6 Using Dashmool and Nirgundi medicines, Sarvanga Swedan, performed by Nadi Sweda, relieves Stambh (stiffness), improves joint mobility, and lessens tension and weariness.

Swedan medications can clean all the body's microchannels.

Katibasti: In a patient with a history of repetitive over-standing work that damages the ligamentum flavum and results in persistent low back pain, Katibasti gives sustenance and lubrication to the Snayu, Sandhi, and Sira structures in the lumbar vertebra. The key ingredients of Ksheer Bala Taila, which is used to treat Vata Vikara, are bala, ksheera, and sesame oil. It has anti-inflammatory effects and normalises vata. 9

Agnikarma: Acharya Charaka recommended Agnikarma as a para-surgical technique for managing pain in Spinal Cord Stenosis¹⁰. Pain is caused by Vata Dosha, which has Sheeta Guna (Vata), and Ushna Guna (Agni), which is the exact opposite of Sheeta (Vata), hence Agnikarma may alleviate pain.

Shodhana Basti is one of the most potent therapies for Vataja illnesses, according to several sources. The medications given by basti stay in the rectum and colon (Pakwashaya) before being absorbed into the body, bringing about the desired effect. The therapeutic effects of these medications draw fluid and harmful material from intra and extracellular levels into the big intestines, where they are expelled from the body. In this instance, Dhanwantri Taila prescribed Ashwagandha + Ksheer Basti followed by Shodhana Basti. Acharya Charaka recommended Tikta Rasa Dravya Siddha. In Asthi-Majjagata Vikara, ashwagandha and ksheer basti are recommended in addition to ghruta. Dhatwagni is improved by Tikta Rasa. An improvement in Dhatwagni outcomes will ensure that all Dhatus receive nourishment and that Asthi Majja Dhatu remains steady. Due to its Brumhan and Pachana properties, Shodhana Basti by Dhanwantri Tail is absorbed and disseminated throughout the body up to subtle channels.

CONCLUSION

Due to a variety of etiological variables, men are more likely than women to experience low back pain, and in addition to patient-related causes, iatrogenic causes are on the rise. In this instance, anaesthesia was the primary cause of the spinal canal constriction that affected the patients' everyday activities and caused them pain, combined with hard work. In the situation where surgical therapy is frequently recommended, the strategy based on Ayurvedic principles produced positive therapeutic effects.

CONFLICT OF INTEREST -NIL

SOURCE OF SUPPORT -NIL

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