

A CASE REPORT ON AYURVEDIC MANAGEMENT OF ACUTE INTERVERTEBRAL DISC PROLAPSE W.S.R TO VATAKAPHAJA GRIDHRASI

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ABSTRACT

Gridhrasi is one among Vataja Nanatmaja Vyadhi. It is a pain dominant lifestyle disorder in which the pain can start from Sphik Pradesha radiating upto Pada. Here due to pain the movements of the affected limb are restricted, making the motility of the person difficult based on the severity of the disease. On the basis of these symptoms, Intervertebral disc prolapse can be correlated with Gridhrasi. Gridhrasi is one such disease caused by the vitiation of Vata which is responsible for the movement and other different functions of the body. The involvement of Kapha Dosha vitiation along with Vata causes Vata-Kaphaja Gridhrasi. Ayurveda has given a detail description regarding the management of of this Vata Pradhana Vyadhi which includes Snehana (Oleation), Swedana (Sudation), Basti Chikitsa (Enema), Shamana Chikitsa (Alleviating medications) and Rasayana (Rejuvenative treatment). Accordingly, certain Panchakarma procedures along with internal medications administered, showed a

good result in the improvement of the overall symptoms and also there was significant reduction in pain, pricking sensation and heaviness in this case of Vatakaphaja Gridhrasi (Intervertebral disc prolapse).

KEYWORDS: *Vatakaphaja Gridhrasi, Intervertebral disc prolapse, Vaitarana Basti.*

INTRODUCTION

Intervertebral disc prolapse (IVDP) is predominantly seen in the individuals who sit for longer duration in inappropriate postures, travel frequently or have a history of trauma along with many other contributing factors. Low back ache has now become a global burden for the upcoming and present generation. Amongst all, IVDP is known to be one of the most prevalent disorders causing a distressful life to an individual with common presenting features like severe pain, pricking sensation, stiffness, twitching and radiculopathy. The prevalence rate is high in third to fifth decade of life, with a male and female ratio of 2:1. In 95% of the lumbar disc herniation conditions, L4-L5 and L5-S1 discs are affected. The estimated prevalence of symptomatic herniated disc of the lumbar spine is about 1-3 percent in patients.^[1]

Gridhrasi is one among the *Vataja nanatmaja Vyadhi* hence *Samanya nidana* and *samprapti* of *Vatavyadhi* can be considered for eliciting the pathology of the disease. In *Gridhrasi*, *sphik* (buttocks), *Kati* (lumbar), *Prushta* (back), *Uru* (posterior of thigh), *Janu* (knee), *Jangha* (calf) and *Pada* (foot) are affected by *Ruk* (pain), *Toda* (pricking pain), *Sthamba* (stiffness) and *Muhuspandana* (tingling sensation) are the symptoms found in *Vataja* type of *Gridhrasi* whereas in *Vata-Kaphaja* type of *Gridhrasi*, *Tandra* (fatigue), *Gourava* (heaviness) and *Arochaka* (aversion) in addition to *Vataja* type is found.^[2]

Chikitsa Sutra of *Gridhrasi* involves Basti Karma, Siravyadha and Agnikarma. The better modality of treatment is always a conservative intervention. In the conservative line of management, Shodana, Shamana & Rasayana holds a better outcome.^[3] Rasayana plays an important role in curing *Vatavyadhi* and also prevents the recurrence of disease.^[4] The treatment protocol for the patients can be divided into Shodhana with Basti Karma and Shamana Chikitsa that mainly include Vedanasthpana, Shothahara, and Vatashamana along with strengthening and nutritive therapy.

CASE REPORT

A moderately built male patient aged about 52 years who is a not a known case of diabetes mellitus and hypertension was apparently healthy before 4 months and approached *Kayachikitsa* OPD of Shri Dharmasthala Manjunatheshwara Ayurveda Hospital Udupi with complaints of pain in low back region radiating to right lower limb associated with pricking sensation and feeling of heaviness of limbs.

At the beginning he developed pain in low back region which was dull aching in nature after which gradually pain increased and started radiating to his right lower limb. Eventually pain was pulling in nature associated with pricking sensation and heaviness which used to get aggravated during prolonged standing hours, lifting heavy weight, while climbing down the stairs and was relieved on taking ample rest and applying hot fomentation. He had consulted a nearby hospital for the same complaints and MRI was advised, which diagnosed the condition as Intervertebral disc prolapse at the level of L5-S1 and was treated symptomatically and was subsequently advised to undergo surgery. As patient was not willing for a surgical intervention, he approached our hospital for further management. Personal history revealed that patient was a non-vegetarian with good appetite and regular micturition and bowel movements. Sleep was disturbed due to severe pain.

General examination of the patient revealed no abnormalities. Vitals being 72/min – regular, respiratory rate 18 cycles/min, blood pressure- 130/80 mm of Hg, body weight- 67 kg.

Local examination of lumbar spine revealed SLR and Braggards – positive at 30 degrees right lower limb, Faber’s test- positive in right lower limb, Pelvic compression test – positive at right side, Heel walk- not possible, Toe walk- not possible, Gait- limping gait, Doorbell’s sign positive at L3-L4, L5-S1. Knee jerk- reduced (+), Flip test- Positive.

Radiological investigation: MRI done on 02/05/2023

Multilevel lower dorsal and lumbar disc degenerative changes along with end plate degenerative Schmorl’s nodes. Right nerve root compression at L5-S1 disc level due to degenerative prominent disc protrusion. Mild cord compression at D11-D12 and D12-L1 due to degenerative IVDP.

Dashavidha pareeksha showed *Vatapitta Prakruti* with moderate *Ahara* and *Jarana Shakti*. Based on the complete history signs and symptoms, *Vatakaphaja Gridhrasi* (Lumbar spondylosis), *Katigraha* (Ankylosing spondylosis), *Prushta vankshana sandhi Bhramsha* (Lumbar Spondylolisthesis) were considered for differential diagnosis.

Intervention

After taking proper history and examination treatment plan was planned accordingly; *Shodhana* with *Vaitrana Basti* in *Yoga Basti* pattern was given for 7 days as mentioned intable 1. ie *Anuvasana* with *Dhanvanthara taila* and *Bhair Parimarjana Chikitsa* like *Nadisweda* to

whole back and bilateral lower limb after *Abhyanga* with *Ashwagandha Balakshadi Taila*. *Shamanoushadi* were given along with *Vaitarana Basti* course for 7 days are listed in table 2. At the time of discharge, only oral medications were given for 30 days like *Yogaraja Guggulu Rasayana* course, *Lakshadi Guggulu* 2 tablets thrice daily, *Maharasnadi Kashaya* 15ml thrice daily, *Vishamushti Vati* 2 SOS.

Pathya (dietetic regimen) was explained to patient.

Table 1: Schedule of *Anuvasana* and *Vaitharana Basti*.

Date	27/5	28/5	29/5	30/5	31/5	1/6	2/6
Type of Basti	A	V	A	V	A	V	A

Table 2: *Sahmanoushadi*.

Sl. No.	<i>Shamanoushadi</i>	Dose	<i>Anupana</i>
1	<i>Yogaraja guggulu rasayana</i>	<i>Rasayana</i> course	With Milk.
2	<i>Lakshadi Guggulu</i>	2 tablet thrice daily after food	With water
3	<i>Maharasnadi Kashaya</i>	15 ml thrice daily after food	With water

OBSERVATION AND RESULTS

All the parameters were accessed based on the scoring done priorly as shown in table 3. the scores were taken before and after treatment. After treatment of 7 days patient was discharged, during discharge he was feeling better due to treatment. There was a significant reduction in parameters listed in the table 4. Only oral medicine with appropriate *Anupana* and *Pathya* has been advised to the patient and was asked to come for a follow-up visit after 15 days. On follow up review as per his statement, pain, pricking sensation and heaviness had reduced.

Table 3: Parameters grading.

Sl. No.	Grade	0	1	2	3
1	Severity of pain	No pain	Mild pain	Moderate, but no difficulty in moving	Much difficulty in moving the body part
2	Severity of pricking sensation	No pricking sensation	Mild pricking sensation	Moderate pricking sensation	Severe pricking sensation
3	Severity of heaviness	No heaviness	Slight heaviness	Moderate heaviness	Severe heaviness

Table 4: Treatment response.

Parameter	Before treatment done on 27/05/2023	After treatment done on 03/06/2023
1. Severity of pain	3	1
2. Severity of pricking sensation	3	1
3. Severity of heaviness	3	0
4. Range of movements of lumbar spine	Flexion: restricted due to pain	Flexion: Possible with pain
	Extension: Possible with pain	Extension: Possible without pain

Table 5: Assessment of Functional Ability (Sugarbaker and Barofsky Clinical Mobility Scale).^[5]

Mobility parameters	Before treatment	After treatment
Upright posture	3	3
Walking	2	3
Gait	0	2
Sitting	0	3
Stair climbing	1	3
Hand held appliances	3	3
Wheel chair	3	3
Time usage	2	3

Table 6: Functional disability (Oswestry disability assessment questionnaire).^[6]

Parameters	Before treatment	After treatment
Pain intensity	4	1
Personal care	3	1
Lifting	3	1
Walking	3	1
Sitting	4	2
Standing	4	2
Sleeping	3	2
Sex life	2	1
Social life	3	0
Travelling	4	2

DISCUSSION

In Gridhrasi, Vata plays an important role. Hence Basti is the best karma to manage Vata dosha.^[7] As Vata has the qualities of Laghu, Ruksha, Chala and Vishada and Kapha Dosha is also involved here, and Kapha has qualities of Guru, Snigdha, Picchila etc. Vata dosha needs Snigdha Chikitsa and Kapha needs Rukshana Chikitsa. Along with this therapy Snehana, Swedana and Basti Chikitsa is to be done.

Inter vertebral disc prolapses, might begin with a slight protrusion of the disc through the

inter vertebral space. This can cause backache, aching sensation in the hip, thigh, leg and foot, restricted movements, inability to carry out normal activities, numbness, pricking and tingling sensation.

Mode of action of vaitharana basti: Shodhana refers to purificatory measures which eliminates vitiated doshas from the body there by pacifying the disease, it not only helps in eliminating doshas from the body but also prevents recurrence of disease.^[8] Basti is one among Shodhana. As Pakwashaya is the Sthana of Vata, Basti helps in removal of vitiated Vata from its Moolasthan so that further progress of the disease is arrested.^[9] Ingredients of Vaitarana Basti are Amalika, Guda, Saindhava, Gomutra and Tila Taila in the proportion of 4:2:1:16.^[10] As a whole, the qualities of Vaitarana Basti can be considered as Laghu, Ruksha, Ushna, Tikshna. Majority of the drugs have Vata Kapha Shamaka action. Basti Dravya after reaching to large and small intestine get absorbed from intestine. The Tikshna Guna of Basti helps in overcoming the Srotodushti resulting due to Sanga. Due to Laghu, Ushna, Tikshna, and Ruksha Guna of Vaitarana Basti Dravya, it breaks the obstructions and expels out the morbid material from all over the body, thus, helps in breaking down the pathogenesis. Owing to these properties, treatment with the Basti has provided significant improvement in signs and symptoms of Gridhrasi.

Mode of action of nadisweda^[11]: It is a type of Sagni sweda, it can be indicated in conditions where in there is involvement of Kapha. The Ruksha Ushna Viryatmaka drugs used in Sagni Sweda are having counter irritant property which stimulates the nerve endings and thus improves blood and lymphatic circulation, helping in vasodilation and in turn increases local tissue metabolism, reduces inflammation by modifying secretion of various inflammatory mediators, thus, helping to relieve heaviness and pain.

Mode of action of yogaraja guggulu^[12]: Yogaraja Guggulu contains a synergistic blend of detoxifying herbs, including Triphala, Chitraka and Vidanga that work in conjunction with Guggulu to remove excess Vata from the joints as well as the nerves and muscles. Mainly the drugs having property like Tikta, Kashaya, Katu Rasa and Ushna, Ruksha Guna, Ushna Virya and acts as Kaphavatahara. Guggulu due to its Lekhana property scraps away the excessive Jalamsha and Amatva which has got accumulated in the joints. Dipana and Pachana Dravya like Shunti, Pippali, Pippalimula helps the medicine to get metabolize easily and completely. Rasadravyas like Naga Bhasma and Tamra Bhasma are Snayushakti Vridhikara, Nadi Mandala Balya Kara. (Have direct role on tendons and nerves). Rasa Sindoor plays a vital

role in controlling the function of Vata and strengthens the functions of motor neurons.

Abraka Bhasma, Vanga Bhasma and Tamra Bhasma are beneficial in pacifying the aggravated vata. Guggulu has Katu Vipaka, Vedanasthapana, Deepana-Pachana, Rasayana and hence, it has Vatakaphashamaka, Amapachaka, Srotoshodhaka properties which helps in breaking the pathogenesis of Gridhrasi.

Mode of action of vishamushti vati^[13]: It contains drugs like Kupilu, Maricha, Indravaruni which has Tiktha Katu Rasa, Lagu Ruksha Teekshana Guna, Ushna Veerya, Katu Vipaka. Vatakapha Sahmana and Vedhanasthapana properties thereby reduce pain, stiffness and improve flexibility of joints.

Mode of action of maharasnadi kashaya^[14]: This Kashaya has Amapachana, Deepana, Pachana, Vatahara, Shulaghna properties. It is a muscle relaxant and useful in treating inflammatory disorders and nervous diseases. The main ingredients are Rasna, Guduchi, Bala and Kantakari. Rasna is Tikta (Rasa), Guru (Guna), Ushna (Virya), and Katu vipak. It pacifies Kapha and Vata. Kantakari prevents allergic reactions by controlling the secretion of histamine in the body. Bala has Madhura Rasa and Vipaka and has Dhaturvardhaka and Ojovardhaka properties. Guduchi works as Vyadi Prathynika Dravya. Guduchi also has Rasayana properties. Guduchi possesses the qualities of Tikta, Kashaya Rasa, Madhura Vipaka and Ushana Veerya. It has action of Vata Shamana and Brimhana, on the tissues, especially the Asthi Dhatu. Guduchi contains glycosides, whose activity resembles that of nonsteroidal anti-inflammatory agents producing anti-inflammatory and immunomodulatory properties.

CONCLUSION

The treatment mentioned here, in this particular case study, that is, Bahir Parimarjana Chikitsa and Shamanoushadi are selected on the basis of the Dosha Dushti that have been observed in the disease. The treatment protocol followed here in this case helped in alleviating the signs and symptoms experienced by the patient, thus, showing remarkable effect both externally and internally i.e subjectively and objectively.

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