

AYURVEDIC MANAGEMENT OF PROLAPSED INTERVERTEBRAL DISC - A CASE STUDY

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ABSTRACT

Prolapsed Intervertebral Disc (PIVD) is a common lumbar Spinal disorder in present era. Disturbed lifestyle and improper postural habits leads to this disorder. PIVD is a displacement of disc material beyond the Intervertebral disc margin which can be described under *Vatvyadhi* which is seen due to *Vatprakopa*. In modern science PIVD require surgical interventions which is avoided by Ayurvedic management. Acharya *Charaka* stated that *Asthapan* and *Anuvasan Basti* are the best choices of treatment to control the *Vata*. Aim of the study was to evaluate the effect of *Shodhan (Basti)* and *Shaman chikitsa* in the management of PIVD. A 55 years old female patient was reported to OPD and then admitted to IPD for a 17 days in

government Ayurved Hospital, Nagpur with the symptoms of backache, severe and continuous lumbar pain radiating to bilateral lower legs tingling sensation and numbness bilateral legs and pain while forward bending. This patient was diagnosed as PIVD on the basis of magnetic resonance imaging (MRI). The patient was treated with *Shodhan* i.e. *Basti*, *Sthanik Snehana* with *Tilataila* and *Sthanik Nadiswedan* along with above procedure *shaman chikitsa* also given. Assessment was done on the basis of GALS (Gait Arm Legs and Spine Examination) and symptoms of patient. Patient shows significant improvement in gait and associated symptoms. In the paper successful management of PID with *shodhan* and *Shaman chikitsa* is being achieved which will be a documented evidence for future case studies.

KEYWORDS:- Prolapsed Intervertebral disc, *Vatvyadhi*, *Shodhan chikitsa*, *Shaman chikitsa*.

INTRODUCTION

PIVD stands for Prolapsed of Intervertebral Disc which means the protrusion through or extrusion of nucleus pulposus through a rent in the annulus fibrosis.^[1] L4-L5, L5-S1 disc are most commonly affected cause of PIVD, by repeated heavy lifting or sudden awkward movement can cause strain on back muscle and spinal ligaments. At least 50% of adults would have experienced a lower back pain (LBP) episode.^[2] Some studies have demonstrated that LBP is one of the most common causes of visits to a physician,^[3] and men and women are equally affected with this.^[4] The disease *Gridhrasi* cited in Ayurvedic treatise has symptomatic similarity with prolapsed intervertebral disc (PIVD), as radiation of pain in PIVD depending upon the nerve root involvement may radiate up to the thigh, knee joints, calf muscle, ankle, or feet. Symptoms of *Gridhrasi* are pain, stiffness, pricking or pulsatile sensation starting from the gluteal region then progressing to the waist, back, thigh, lower leg, and foot.^[5] In PIVD NSAIDs such as Naproxen sodium are the main management of patient as they provide symptomatic relief. *Panchkarma* gives the best result in case of PIVD. Here the female patient does not get relief from allopathy treatment is planned for *Panchkarma* like variety of *Sthanik* and *Sarvadaihi Chikitsa* like *basti*.

CASE REPORTS

A female patient of age 55 years visited at O.P.D. and admitted in I.P.D. (7477/105) with following complaints

Chief complaints

- 1) Pain at lower back
 - 2) Both lower limb tingling sensation from lumbar region
 - 3) Left lower limb pricking pain with radiating from lumbar region
 - 4) Difficulty in walking
 - 5) Disturbed sleep
- H/O Present illness

55 years old female subject was healthy before 1 month. Subject had complaint of lower backache with radiating pain to left leg which was progressively increasing. Though she was occupation by house wife but had history of jerk before 8 days which was a trigger factor for aggravating the pain at lumbar region and radiates to left lower limb along with tingling sensation. So she was facing difficulty in walking and easy of movements of left lower limbs. She had consulted outside, suggested operative for it.

Past history

- No Past History of – H.T.N. / D.M./ No any other major illness
- No Past History of fall/trauma/Personal history
- Ahar- Bakery products, Nonvegatrian (once a month), Eggs(2-3 times in week)
- Vihar –Disturbed sleep, Ati Chakaraman, Vegaavarodha
- Other- h/o jerk 8days ago
- Appetite – Loss of appetite
- Bowel- 1 times/2days - Constipation
- Micturition – 4-5 times per day regular
- Habit- No any addiction

General examination

Pulse Rate- 70/min,

B.P. - 116/84mmHg

Respiratory rate – 18/ min

Spo2-97% on Room Air

Systemic examination

CVS – S1 and S2 sounds presentNo murmur

CNS – Conscious and OrientedRS – AEBE clear

No any additional soundsP/A – Soft and Non tender

Clinical finding

S.L.R.T. – Left leg 30 degree positive and right leg 50-degree positive. Lasegue Test – positivebilateral both lower limb.

Investigation

CBC

WBC – 6900

Hb- 13.6

Plt- 188000

BSL- 79

Urine ®-WNL

MRI - lumbar spine

Posterior protrusion of L4-L5 disc compressing thecal sac and encroachment of both L4 and L5 foramina is noted. Compression of exiting nerve root of this site is likely.

Diagnostic assessment

The diagnosis was done based on symptoms and MRI findings. In Ayurveda, this condition resembles *Gridhrasi*. In MRI, Posterior protrusion of L4-L5 disc compressing thecal sac and Compression of exiting nerve root of this site. In magnetic resonance imaging (MRI), there were no signs of fracture, benign or malignant tumours, congenital deformity. So, these things were excluded from the differential diagnosis.

Therapeutic intervention

A) *Shaman chikista*

- 1) Firstly started with *Dipan* and *Pachan* drugs like *Agnitundi vati* and *Gandharv Haritaki* for Anuloma^[6] to remove the *Samata* and obstructive phenomenon so drugs acts freely and reduce digestive complaints of patient.
- 2) Then started medicine according to *Dosha Avastha* and *Prakruti* with *Shaman Chikista*, are as follow,
 - *Kaishor Guggule* 2 bd
 - *Asthimajja Pachak Vati* 2 bd with warm water

B) *Shodhan Chikista*

- 1) Firstly due to pain in lower limb started *Stanik Abhynga* on both lower limb with *Til Taila* and followed by *Nadi Sweda* along with *Kati Basti* with *Til Taila* and myoset oil.
- 2) *Anuwasan Basti* with *Balaashwagandhadi Tail* 60 ml and *Asthimajja Pachak Kwath Niruha Basti* 420 ml *Vytasat Chikista*.

RESULT

As we know when patient was admitted she was able to walk with support only, after treatment patient start walking without support with gradually increased S.L.R.T. from 30 degrees up to 60 degrees of left lower leg.

All other symptoms such as disturbed sleep, decreased appetite etc. were also improved. The bowel habit is changed from constipated to complete evacuation daily. There were no any adverse effects of the given treatment found in the patient.

Table no. 1.

Sr. No	Complaints	Parameters	Gradation
1	Both lower limbs tingling sensation from lumbar region	Mild Moderate Severe	0 2 4
2	Left lower limb pain radiating from lumbar region	Mild Moderate Severe	0 2 4
3	Pain at lower back	Mild Moderate Severe	0 2 4
4	SLRT(in degrees)	10 20 30 40 50 60 70 80 90	9 8 7 6 5 4 3 2 1

Table number 2.

Sr. no.	Symptoms	Before treatment	After treatment
1	Both lower limbs tingling sensation from lumbar region	4	0
2	Left lower limb pain radiating from lumbar region	4	0
3	Pain at lower back	2	0
4	SLRT (in degrees)	7	4

DISCUSSION

As we know *Grudhrasi* is included in *Vataj Nanatamaj Vyadhi*,^[7] So the general principle of treatment of *Vata Dosha* is adopted in case of *Grudhrasi*.

- Grudhasi* explained by *Acharaya Charak* mainly of two type^[8]

- 1) *Vataj*
- 2) *Vatkafaj*

- On admission patient having *Saam Jivha*, loss of appetite (due to *Mandagni*) and Constipation (*Malavastamb*) and. So in first five days *Aamapachan* and *Agni Deepan* done by *Agnitundi Vati*. Along with *Gandharava Haritaki* is used for *Vataanulomana*.
- To relieve pain and *Vata Dosha Shaman* we started *Kaishor Guggule*.
- Basically in PIVD *Vata Prakopa* is due to *Vikruti* of *Asthidhatu* (Vertebras) and

Majjadhatu (Prolapsed part of disc and affected nerves roots). So to produce normal and *Asthimajja Dhatu* and *Shodhan* of Increased *Vata Dosha* we started *Abhyanga*, *Nadi Swedana* and *Kal Basti Chikitsa* with *Asthimajja Pachak Kwath*. *Abhyanga* (massage) acts on the root of *Mamsavaha Srotas* (channels carrying muscle nutrients) i.e. *Snayu*, *Twak* and *Raktavahini*. It may thus nourish the superficial and deep muscles and make the joints stable. *Swedana* (sudation) is *Sthambhagna* (removes stiffness), *Sandhichestakar* (increases joints mobility), *Srotoshuddhikar* (cleaning the micro channels) and *Kapha-vata Nirodhana* (removing excess *Vata* and *Kaphadosha*). Thus by its action, the *Srotosangavighatana* (breakdown the pathogenesis by removing obstruction in the micro channels) may take place and stiffness of the joints relieved. For *Anuvasan Basti* we used *Bala Ashwagandhadi Tail* which is *Jivaniya*, also *Vataghna* (removing excess *vata*) with *Raktaposhana* (increasing blood) qualities which help in improving the strength of muscles, thus nourishing *Mansa* (muscles) and *Majja*.

- *Kati Basti* with *Til Tail* given for 16 days, *Til Taila* is best *Vatshaman Taila* and it nourishes the degenerated bones and joints.
- *Basti* is useful in *Kshina Dhatus* (depleted tissues) and *Bhagna* (fractures) of the *Asthi* (bones) and *Sandhi* (joints). *Basti* is prepared by *Anuvasan Bala Ashwagandhadi Tail* 60ml & *Asthimajja Pachak Kwath Niruha* 420ml which is given on alternate day as a *Kalbasti Karm*.^[9]
- The medicines used in *Shamana chikitsa* (oral medicine) like *Kaishor Guggulu* which is potent for *Vata Nashaka* (normalising excess *Vata*), *Rasayan* (rejuvenating), *Balya* (strength promoting activities), *Vata Shamak* and *Tarpak* (providing nutrition and support).

CONCLUSION

The result shows that the Ayurvedic treatment modalities were found quite effective and reliable for the treatment of Sciatica which can be well correlated to *Grudhrasi*. However, further work should be done on large samples to draw the final conclusion.

Abbreviation

PIVD – Prolapsed intervertebral disc S.L.R.T.- straight leg rising test.

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