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AYURVEDIC MANAGEMENT OF KATIGATA VATA W.S.R TO LUMBAR RADICULOPATHY

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ABSTRACT

Lumbar pain is commonly observed due to altered life style. In Lumbar radiculopathy the specific clinical symptoms are a severe lumbar pain, radiating pain in back towards lower limb, tingling numbness in lower limb. Lumbar radiculopathy in *Ayurveda* have been discussed under the broad heading of *Vatavyadhi*. *Katishula* (lumbar pain), *Kati to Pad Teevrashul* (pain in back radiating towards lower limb), *Pad Chimchimayana* (tingling numbness in lower limb), *Sakashtachakramana* (difficulty in walking) are the symptoms of *Katigata Vata*. The article highlights a case study of Lumbar radiculopathy treated with the *Ayurvedic* principles in

particular *Shodhana Chikitsa*; the therapy which expels out the morbid *Doshas* from the body. *Vata* is responsible factor for all *Vatavyadhi* and *Basti* is best *Shodhana* therapy for *Vatavyadhi* which is helpful to treat the diseases from its root. Here is a case study of 67yrs/male having signs and symptoms of lumbar radiculopathy (*Katishula*). The patient was admitted and managed with *Basti Chikitsa* (purification) which includes *Panchatikta Ksheer Basti* (medicated milk enema) and *Katibasti* (local *Basti*) followed by *Shamana Chikitsa* (pacification) and Physiotherapy and the results with rationality have been depicted in this article.

Keywords: *Katigata Vata, Lumbar Radiculopathy, Panchatikta Ksheer Basti, Katibasti*

INTRODUCTION

One of the most common diagnosis now a days evaluated by an orthopaedician is lumbar radiculopathy. Radiculopathy is a term used to describe as pain caused by compression or irritation of nerve roots in the lower back. It can be caused by lumbar disc herniation, degeneration of spinal vertebra and narrowing of the foramen from which the nerves exist the spinal canal. Compression of the nerve roots at the level of L1- S4 is main damage in lumbar radiculopathy. The compression can result in low back pain that radiates into the lower extremities other symptoms are tingling, numbness, paraesthesia, and weakness of both limbs. Its prevalence has been approximately 3-5 % of the population is affecting both male and female [1]. Age is primary risk factor, as it occurs secondary to the degenerative process within the spinal column. Symptoms typically begin in midlife, with men often affected in the 40s while women are affected

in 50s and 60s [2]. Radiculopathy can occur in any part of the spine, but it is most common in the lower back (lumbar-sacral radiculopathy) and in the neck (cervical radiculopathy). It is less commonly found in the middle portion of the spine (thoracic radiculopathy) [3]. According to the ethology and severity of symptoms treatment varies. Conservative management of symptoms is generally considered the first line. NSAIDs, Calcium and Vitamin D supplement, Muscles relaxants, Acupuncture, Chiropractic Manipulation, Lumbar belt, Physiotherapy and Traction are used in the treatment of lumbosacral radiculopathy. Further, worsening of disease may need injection therapy which may include epidural steroids injection, facet injection or transforaminal injection. Often next step is surgical intervention like Hemi facetectomy, Laminectomy or Disc

excision [4]. This condition can be correlated with *Katigata Vata* in ancient texts. Also describe, disorder having resemblance such as *Katigraha*, *Trika Graha*, *Prushta Graha*, *Trika Vedana*, *Gridrasi*. *Katigata Vata* is not mentioned as a separate disease entity in *Ayurvedic* text [5, 6], it is mentioned under 80 types of *Vyadhi* in *Charak Samhita*. Now a days it is commonest disease due to improper sitting posture, dietary habits which is mainly caused by vitiation of *Vata Dosha* [7]. For present study, 67-year male patient having symptoms of *Katishula* (lumbar pain) *Vama Kati* to *Pad Teevrashul* (pain in back radiating towards left lower limb), *Vama Pad Chimchimayana* (tingling numbness in left lower limb) *Sakshtachakramana* (difficulty in walking) since last 4 years have been reported. Patient has taken allopathic medicine like steroids, anti-inflammatory drug, analgesic drug and injection therapy but got relief for shorter duration. After 1 years, patient started complaining of above symptoms with increased severity and intensity. So patient came in our hospital for further management of disease. The patient was treated with *Basti Chikitsa* (medicated enema), *Shamana Chikitsa* (pacification), Physiotherapy, *Ayurvedic* oral medications and *Pathya* (wholesome diet) regimen. After

20 days of treatment a significant relief was observed.

MATERIALS AND METHODS

- Study design: single case report.
- Written consent taken from patient in his own language
- For the present study, 67 years old male patient having symptoms of lumbar radiculopathy (*Katigata Vata*) for 4 years has been discussed in detailed manner.
- Assessment criteria: Subjective parameters were the main assessment criteria for final diagnosis.
- Oral medications, *Panchakarma* therapy and Physiotherapy treatment was the main line of treatment.

Case Report:

A 67-year Hindu male patient residing in Pimpri Pune came to OPD of Kayachikitsa Department of Dr. D. Y. Patil Ayurveda Hospital on the date 22 June 2021; with the following complaints:

- **Chief Complaints:** *Katishula* (lumbar pain), *Vama Kati* to *Pad Teevrashul* (pain in back radiating towards left lower limb), *Vama Pad Chimchimayana* (tingling numbness in left lower limb),

Sakshachakramana (difficulty in walking)

- **History of Present illness:** Patient was asymptomatic before 4 years then he experience above mentioned symptoms for which he visited to orthopedician outside and was advised intra spinal injection of corticosteroids after receiving it, he got relief for the period of 1 year and then he again developed all the symptoms with increased severity and intensity. Hence patient came to Dr. D.Y Patil Ayurveda Hospital for *Ayurvedic* line of management.
- **History:** No H/O Diabetes Mellitus, Hypertension, Ischemic Heart Disease, Tuberculosis
- **Family History:** Nil
- **Personal History:**
Occupation- Retired mechanical engineer
Appetite- Normal
Addiction- No
Bowel Habit- Normal 1 time/day
Urine- Normal
Sleep- Disturbed due to severe backache

Diet- Pure Vegetarian diet

- **Investigations:**

All investigations mentioned below are dated on 14/06/2021

CBC- Hb-13.9gm/dl, WBC- 5000/cumm, Platelet- 2.05lac/cumm

Urine routine & microscopic- NAD

BSL (R)-139mg/dl

Calcium-9.5

Vitamin B12-171.0 pg/ml

Radiological investigation:

X-ray Lumbo-Sacral Spine AP and Lateral 2/3/17 –Scoliotic deformity of lumbo – sacral spine

MRI Lumbo-Sacral Spine with Whole Spine 24/3/17-L4-5- disc shows diffuse disc bulge, more towards left (asymmetric disc bulge), causing compression over thecal sac compressing both traversing L5 nerve roots (left > right) and contributing to lateral recess and neural foramina narrowing on both sides. Facet joint arthropathy is noted. Degenerative changes of lumbar spine.

X-ray Lumbo-Sacral Spine AP and Lateral 15/6/21- Osteoporosis, change of lumbar spondylosis

On Examination

Table 1: General examination:

General Condition	Good
Pulse	88/min
Blood Pressure	130/80mmHg
Pallor	Absent
Systemic Examination	NAD
P/A	Soft & Non tender

Table 2: Assessment criteria before treatment:

Test	RIGHT LEG	LEFT LEG
SLRT	70 degree	20 degree
RSLRT	Negative	Positive
SNDT	Negative	Positive
PUMP HANDLE	Negative	Positive
LASSIGUE SIGN	Negative	Positive
ROTATION	Negative	Positive
Muscle Power Grade	Right Extremities (Upper and Lower)-5/5	Left Extremities (Upper and Lower)-5/5

(SLRT:- Straight leg rising test, RSLRT: Reverse straight leg rising test, SNDT: Sciatic nerve deep tenderness test)

Table 3: Assessment Criteria before Treatment:

Symptoms	Before treatment
<i>Katishula</i> (lumbar pain)	+++
<i>Vama Kati to Pad Teevrashul</i> (pain in back radiating towards left lower limb)	++
<i>Vama Pad Chimchimayana</i> (tingling numbness in left lower limb)	+++
<i>Sakshachakramana</i> (difficulty in walking)	+++

(Gradation: NO Pain – (No pain), Mild Pain (Pain felt only at time of movement) +, Moderate Pain (Persistant pain but not affecting daily routine) ++, Severe Pain (Affecting daily routine) +++)

Diagnosis:

Disease was diagnosed as Lumbar radiculopathy (*Katigata Vata*) based on *Katishula* (lumbar pain), *Vama Kati to Pad Teevrashul* (pain in back radiating towards

left lower limb), *Vama Pad Chimchimayana* (tingling numbness in left lower limb), *Sakshachakramana* (difficulty in walking), SLRT Test, RSLRT Test, SNDT Test.

Table 3: Samprapti Ghatak (Etiopathogenesis) [8]

Dosha	Vata Pradhan Tridosha
Dushya	Rasa, Rakta, Mamsa, Asthi, Majja, Sira, Kandara, Snayu
Strotas	Rasavaha, Raktavaha, Mamsavaha, Medovha, Asthivaha, Majjavaha
Srotodushti	Sanga, Vimargaman
Adhasthan	Pristha, Kati, Sphik
Udhhavasthana	Pakwashaya
Vyakta Sthana	Sphik, Kati, Prushta, Uru, Janu, Jangha Pada

Treatment Plan:

- *Shodhana therapy*
- *Shamana Chikitsa like Vata Shamana Aushadi*

- Physiotherapy

Table 4: Shamana Aushadhi (pacification)

Medicine	Dose	Anupana	Route	Duration
<i>Panchatikta Ghrita Guggulu</i>	250 mg	Lukewarm water	Oral	2 tab twice daily
<i>Mahavat Vidhwansan Rasa</i>	250 mg	Lukewarm water	Oral	2 tab twice daily
<i>Vatahara Yoga with Erand Tail</i>	2gm 2 tsf	Lukewarm water	Oral	Night

Table 5: Panchakarma Therapy (purification therapy)

Procedure	Medicine	Quantity	Duration	Route
<i>Sarvanga Snehan (Oleation Therapy)</i>	<i>Dashamula Taila</i>	As per requirement	20 days	Local application
<i>Sarvanga Swedana (Sudation Therapy)</i>	<i>Bashpa Sweda with Dashamula Kwatha</i>	As per requirement	20 days	Local application
<i>Kati Basti (local Basti)</i>	<i>Dashamula Taila</i>	As per requirement	20 days	Local Application
<i>Basti (Medicated Enema)</i>	<i>Panchatikta Ksheerabasti Kantakari (Solanum xanthocarpum) Guduchi (Tinospora cordifolia) Patola (Luffa acutangula) Nimba (Azadirachta indica) Vasa (Adhotoda vasica) each 3gms, Ksheerapaka- 250 ml Panchtikta Ghrita- 30ml</i>	280 ml	20 days	Anal

OBSERVATION & RESULT

The Results observed after the treatment: By the end of 20th day moderate relief was seen in *Katishula* (lumbar pain), *Vama Kati to Pad Teevrashul* (pain in back radiating

towards left lower limb), *Vama Pad Chimchimayana* (tingling numbness in left lower limb) *Sakstachakramana* (difficulty in walk)

Table 5: Showing Overall Result of Treatment

Symptoms	Before treatment	After treatment
<i>Katishula (lumbar pain)</i>	+++	+
<i>Vama Kati to Pad Teevrashul (pain in back radiating towards left lower limb)</i>	++	-
<i>Vama Pad Chimchimayana (tingling numbness in left lower limb)</i>	+++	-
<i>Sakstachakramana (difficulty in walking)</i>	+++	-

Table 6: Assessment criteria before and after treatment

Test	Before treatment		After treatment	
	RIGHT LEG	LEFT LEG	RIGHT LEG	LEFT LEG
SLRT	70 degree	20 degree	70 degree	70 degree
RSLRT	Negative	Positive	Negative	Negative
SNDT	Negative	Positive	Negative	Positive
PUMP HANDLE	Negative	Positive	Negative	Negative
LASSIGUE SIGN	Negative	Positive	Negative	Negative
ROTATION	Negative	Positive	Negative	Negative
MUSCLE POWER GRADE	Right Extremities (Upper and Lower)-5/5	Left Extremities (Upper and Lower)-5/5	Right Extremities (Upper and Lower)-5/5	Left Extremities (Upper and Lower)-5/5

DISCUSSION

In the present study, *Shodhana* (purification), *Shamana* (pacification) and Physiotherapy are the treatment principles. *Sarvang Snehan* with *Dashamula Taila* was used for the purpose of *Vatashamana* after that *Sarwanga Swedan* was done which for *Doshavilayana* (liquefies the *doshas*) and brings them from *Shakhas* to *Koshta*. It also removes the *Srotorodha* (obstruction in the *strotas*). *Kati Basti* with *Dashmula Taila* help to increase blood circulation to the affected area, get rid of *Dosha* imbalance, strengthens the muscle in the area. *Panchatikta Ksheera Basti* may give nourishment to bones, relieves pain, tenderness, improvement in gait. Physiotherapy helps in strengthening and mobilize tissues in lower back pelvis, abdomen, buttocks and thigh.

Mode of action of Oral medications:

- i. *Panchatikta Ghrita Guggulu* contains *Tikta Rasa* drugs having *Vataghna* and *Rasayana* (*Dhatuwardhan*)

properties. It digests and metabolizes abnormal *Kapha Kleda* (*Pachan & Parinaman*) thus destroying *Srotorodha*, ultimately leading to promotion of movement of *Vata Dosha* in body channels. *Guggulu* possesses *Vataghna*, *Asthiposhak*, *Yogavahi*, *Rasayana*, *Shoolaghna*, *Shothaghna* properties. *Yogavahi* property of *Guggulu* increases potency of another drug. *Goghrita* is also *Vatapittashamak*, *Sookshma Srotogami*, *Yogavahi*, *Rasayana* and best *Sneha Dravya*. Thus, *Panchatikta Ghrita Guggulu* is best *Vataghana*, *Shoolaghna*, *Rasayana* combination in lumbar radiculopathy [9].

- ii. *Mahavat Vidhwansan Rasa* is useful to promote strength to bones and joint. Its acts as an excellent anti-inflammatory and analgesic medicine.

- iii. *Vatahara Yoga* with *Erand Taila* having *Vatashamaka*, *Kaphashamaka*, *Aamapachana*, *Dipana*, *Vedana Sthapana* and *Rasayana*. Due to *Ushna Virya* and *Vatanulomana* properties it normalizes the movement of *Apana Vayu* and *Vyana Vayu* which in turn helps to relieve pain.

Mode of action of *Panchakarma* therapy:

- i. *Snehan -Dashamula Taila* used for *Bahya Snehana* has *Vata shamaka* properties, nourish the superficial and deep muscles and make the joint stable, increase muscle strength, relieves pain [10].
- ii. *Swedana-Swedana* is a traditional herbal steam therapy in *Ayurveda*. *Swedana* is the process of inducing sweat with the help of steam generated from medicated herbal decoctions. Hot fomentation at the local site of pain with *Dashamula* decoction does downward movement of *Vata*, reduces stiffness and heaviness from the body [11], reduce numbness, stiffness, rigidity, improve mobility
- iii. *Basti-Basti* circulates all over the body and treat the root cause as the plant is watered at the roots provides nourishment to whole plant. According to *Charaka*, *Basti* is told as *Ardha*

Chikitsa i.e half treatment for the management of *Vata* predominant disease. *Basti* have been categorised into various types according to ingredients, action & number of *Basti*. *Panchatikta Ksheer Basti* was selected as per the condition of disease and condition of the patient. In *Panchatikta Ksheer Basti* we are using *Ghrita* and *Ksheera* which are good *Vatashamaka* and *Asthi Poshak*. *Panchatikta* i.e *Nimba*, *Amruta*, *Patol*, *kantakari* and *Vasa* [12] they are *Tikta Rasa* having properties of *Vataghna* and *Rasayana*. It strengthens *Jatatharangi* as well as *Dhatwangni* i.e metabolic fire. It digest and metabolizes abnormal *Kapha*, *Kleda (Pachana and Parinaman)*, thus destroying *Srotorodha*, ultimately leading to promotion of movement of *Vata Dosha* in body channels [13].

- iv. *Kati Basti*- Application of *Kati Basti* with *Dashamula Taila* is an excellent *Vatashamak*, having anti-inflammatory properties, helpful to lubricate muscle and tissue, help in arresting degenerative process. It increases local blood flow that help to drain out the inflamed exudates [14].

CONCLUSION

Katigata Vata is a *Vatavyadhi* with predominance of *Vata Dosha* having the

symptoms of difficulty in walking, tingling numbness which in turn hampers quality of life. In Allopathic treatment Analgesic, anti-inflammatory, steroids are used only for symptomatic relief. Prolonged duration of these drugs has side effects. While *Ayurvedic* herbs along with *Panchakarma* and Physiotherapy shows highly encouraging results in lumbar radiculopathy. We have specially focused on action of *Panchatikta Ksheera Basti and Kati Basti* in this condition. Therapeutic pharmacological action of all drugs based on qualities follow the *Samprapti Vighatana Chikitsa Siddhanta* (Breaking of etiopathogenesis as a principle of treatment). This was a single case study which proves effect of *Ayurveda* treatment on lumbar radiculopathy and no requirement of surgical intervention was advised till date as well as no recurrence in symptoms.

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