



Management Of *Katigraha* Through Ayurveda - A Single Case Study

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Abstract:-

Katigraha i.e., low back pain is a commonly occurring disease in many people. It commonly affects the old aged people. *Snehana* & *Swedana* is mentioned as a remedy for *Vata Vyadhi* in *Charak Samhita*. It is used in a patient of *Katigraha* in the form of *Kati Basti*, *Patra Pinda Swedana* & *Upanaha Swedana* along with internal medicine (*Rasarajeshwar Rasa*). The case was assessed on criteria like the ODI scale, VAS score, Straight leg raise test, Lasegue Test, and Bragard's Test. This treatment showed a very much effect in this patient. After 14 days the patient was assessed & it was seen that the patient got symptomatic relief & patient was able to walk up to 2 km without any pain.

Keywords: Ayurveda; *Kati Basti*; *Katigraha*; Low back pain; Lumbar Spondylosis; *Patra Pinda Swedana*; *Upanaha Sweda*

1. Introduction: -

Low back pain (LBP) is the most common musculoskeletal problem globally.^{1,2,3,4} Population prevalence, lower back pain affects 60-80% of adults.⁵ The overall prevalence of lower back pain is higher in women than in men.^{6,7} In the USA, back pain is the most common cause of activity limitation in people younger than 45 years, the second most frequent reason for visits to the family doctor, the fifth-ranking cause of hospital admission, and the third most common cause of surgical procedures.^{8,9,10} In the present scenario, the treatment modalities for lower back pain are conservative treatment with analgesics, physiotherapy, muscle relaxants, and narcotics and few require surgery which has its disadvantages or is expensive.

Vatavyadhis come under a group of diseases that manifest by *Dhatu Kshaya* or *Margavarana* and those are classified according to *Hetu*, *Sthana*, and *Lakshana*. Many degenerative conditions are considered under *Dhatu Kshaya Janya Vatavyadhis*. *Katigraha* is a commonly affecting problem in the population. The potential causes of this disease are aging, trauma, a sedentary lifestyle, and lack of exercise. Stress in the Workplace is also a causative factor. In classical *Ayurvedic* Texts, *Katigraha* can be referred to as *Katisandhigat Vata*, *Trika graha*, *Kati vayu*, *Trika shoola*, *Vataja shoola*, etc.^{11,12,13} *Katigraha* affects the body due to vitiation of *Vata Dosha* along with *Kapha*.¹⁴ The clinical features include *Ruk*(pain), *Toda* (pin-like sensation), *Stambha*(stiffness), *Muhuspandana* (twitching and cramping) in the *Sphik* (buttock), *Kati* (Waist), *Uru* (thigh), *Janu*(knee), *Jangha*(calves) and *Pada* (foot)¹⁵. The Ayurvedic treatment consists of *Snehana* (oleation therapy), *swedana* (sudation therapy), *Basti* (medicated retention enema), *Agnikarma* (Therapeutic cautery), and *Vatahara Shamana yogas* (Palliative therapy). Here, one Patient complaining of Low back pain and stiffness at the Kati region was taken, which is well treated by *Kati Basti*, *Patra Pinda Swedana* & *Upanaha Sweda*. The patient was clinically diagnosed and selected for the study.

2. Case Report:-

The patient was selected from the OPD -7 of Sanjivani Hospital, Dr. Sarvepalli Radhakrishnan Rajasthan Ayurveda University, Jodhpur, Rajasthan. It was diagnosed with *Katigraha*. Patients with other allied symptoms like swelling, Sciatica, and *Aamavata* were excluded from the study.

Chief complaints: The 46 years old patient has a low back pain radiating from the right leg down up to the toe for the last 10 days and came to the Outpatient department of Panchakarma Department of Dr. Sarvepalli Radhakrishnan Rajasthan Ayurveda University, Jodhpur for treatment. The patient was unable to walk (came in a wheelchair).

History of Present Illness: The patient was healthy for 10 days, after that he suddenly got lower back pain. The patient was unable to walk (came in a wheelchair). He took some allopathic medicines for 2 days but did not get relief, so he came here for *Ayurveda* treatment.

Known Case Of - Not any

PAST HISTORY: No any

SURGICAL HISTORY: No major surgical history.

MEDICINAL AND ALLERGIC HISTORY: No medicinal and drug allergic history.

PERSONAL HISTORY:

- Appetite-Normal
- Diet-Vegetarian
- Sleep- Normal
- Micturition-Normal 4-5 times/day
- Bowel-Mildly Constipated
- Addiction-Not any
- Occupation-Security Guard (since last 20 years)

FAMILY HISTORY: The patient's elder brother has the same problem

GENERAL EXAMINATION:

- CNS:- Patient is well-oriented to time, place & person.
- CVS :- S1 & S2 heard
- RS:- bilateral vesicular breathing

INVESTIGATIONS: - MRI of LS Spine –

- L1-L2, L2-L3 IV-disc levels: B/L posterolateral disc bulge
- L3-L4 IV-disc level: Partial degenerative water loss, B/L posterolateral disc bulge.
- L4-L5 IV-disc level: Degenerative water loss, Posterior disc bulge with posterior Central annular fissure, B/L ligamentum flavum, and facet hypertrophy
- L5-S1 IV-disc level: Degenerative water loss, decreased disc space, Posterior disc bulge as well as broad-based posterior central, right paracentral disc protrusion, caudal disc migration (2.1 mm), B/L ligamentum flavum and facet hypertrophy causing indentation over anterior thecal sac, central canal stenosis (8.7 mm), narrowing of bilateral lateral recesses, neural foramen, and compression over bilateral exiting & traversing nerve roots.

EXAMINATION:

Table 1 Findings of examination of patient on 1st day

Parameters	Findings	
Temperature	97.8° F	
Pulse	82 bpm	
RR	18 bpm	
BP	130/80 mm of Hg	
SLR	right leg - 20°	left leg - 80°
Lasegue	right leg - 15°	left leg - 80°
Bragard's	right leg - 20°	left leg - 85°
ODI score	47	

3. Intervention:-*Table 2 Treatment plan*

Days	Panchakarma Procedures	Internal Medicine with Dose
1 st -7 th	Kati Basti	Rasarajeshwar rasa 1 tab. BD after the meal with lukewarm water.
8 th -14 th	Patra Pinda Swedana Upanaha Swedana	Rasarajeshwar rasa 1 tab. BD after the meal with lukewarm water.

4. Observation: -

The patient was examined after 14 days and the following findings were observed: -

Table 3 Findings of examination of the patient on the 14th day

Parameters	Findings	
Temperature	97.6° F	
Pulse	79 bpm	
RR	17 bpm	
BP	126/80 mm of Hg	
SLR	right leg - 80°	left leg - 90°
Lasegue	right leg - 75°	left leg - 85°
Bragard's	right leg - 85°	left leg - 90°
ODI score	13	

5. Methodology:-

5.1 Materials:-

Table 4 Materials required for karma/ingredients of Aushadhi

2) For <i>Kati Basti</i> : -	3) For <i>Patra Pinda Swedana</i> : -	4) For <i>Upanaha Swedana</i> : -	5) Contents of Rasarajeshwar rasa: -
Black gram flour – 250 gms Medicated oil – 200 ml Water Pan for making dough Bowl for oil Heating device Hot water utensil Sponge Masseurs – 1	Leaves (Chopped into pieces) of <i>Nirgundi</i> – 100 gms <i>Eranda</i> – 100 gms <i>Chincha</i> – 100 gms <i>Dhatura</i> – 25 gms <i>Shigru</i> - 25 gms <i>Arka</i> – 25 gms Grated coconut – 150 gms Lemon - 4 Cotton cloth (45 cm × 45 cm) – 2 pieces Tags - 2 Vessels (for frying leaves & for heating Pottalis) – 1 <i>Saindhava</i> , <i>Rasna</i> , <i>Shatapushpa</i> , <i>Methika</i> – each 10 gms <i>Tila Taila</i> Masseurs – 2	Coconut grating – 100 gms <i>Saindhava Lavana</i> – 10 gms <i>Methika Churna</i> – 100 gms <i>Shatapushpa Churna</i> – 100 gms <i>Asthi Santhanak Churna</i> – 30 gms <i>Dashanga Lepa</i> – 30 gms Lemon - 1 Heating Device Iron pan Spatula <i>Tila Taila</i> – 50 ml Cotton cloth (20×20 cm) - 1 Bandage – 2 Masseurs – 2	Rasaraja Rasa with gold – 10 mg Shuddha vishamushti – 100 mg Ashwagandha – 100 mg Rasa sindoor – 40 mg Guggul – 30 mg (Dashamoola Vishesh shodhita)

5.2 Method: -

Table 5 Methods of Karma

	<i>Kati Basti</i>	<i>Patra Pinda Swedana</i>	<i>Upanaha Swedana</i>
<i>Poorva Karma</i>	The dough was prepared by using black gram flour and water. The patient should be lying down prone position on <i>Droni</i> with exposed lower back properly. This dough was fixed on the lumbosacral area in a circular shape. Proper sealing was ensured to avoid leaking of oil.	The patient should be seated with the leg extended over the <i>Droni</i> . <i>Abhyanga</i> was performed with <i>Prachala Taila</i> over the lower back and lower extremities for 15 minutes.	The affected area should be examined properly and the tender region. Examine for scars, wounds if any. The patient is asked to sit erect by extending lower limbs, on the table. Expose the lower back properly.
<i>Pradhana Karma</i>	<i>Prachala Taila</i> was made warm by keeping the vessel in a hot water bath. After ensuring a tolerable temperature, oil was poured inside along the sides of the dough. The temperature of the oil was maintained at 39°C-40°C.	The prepared <i>Pottali</i> was heated with suitable oil in an iron pan up to 40-42°C. It was applied, after checking the temperature over the dorsum of the hand. Then it was applied throughout the lower back & lower extremities with mild pressure in 4 positions (supine, left lateral, right lateral & prone) by 2 masseurs standing on both sides of <i>Droni</i> . Care was taken to maintain the temperature throughout the procedure by reheating the <i>Pottalis</i> . (Duration – 30 minutes)	The prescribed medicines were made into paste form by adding a sufficient amount of coconut grating. Then <i>Upanaha</i> was prepared by heating it over a medium flame. The lower back was exposed properly. <i>Sthanika Abhyanga</i> with <i>Tila Taila</i> was done. The prepared medicinal paste was applied over the cotton cloth uniformly with a spatula. This cloth was applied over the lower back in such a manner that the paste was in touch with the body part. Then it was bandaged with the help of a gauge roll.
<i>Paschat Karma</i>	After 45 minutes, the oil was removed and so was the dough. The part was	Wipe off the oil from the body using a clean dry towel. The patient should take complete rest for at	After 4 hours <i>Upanaha</i> was removed and the part should be cleaned with warm water.

	massaged with circular and linear strokes.	least 30 minutes and should take a bath in hot water.	
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Preparation of Pottali: Fresh leaves should be cleaned & chopped finely. First add 50 ml of *Tila Taila* onto a frying pan, to this add grated coconut & sliced lemon and fry till it turns tinged brown. Add chopped leaves one by one; first, add drugs with thick leaves followed by thin ones. Then mix thoroughly and fry together till coconut scrapings attain a brown color. It should be divided into two equal parts and made into 2 *Pottalis* (the average weight of a standard *Pottali* is 300-350 gm).

Preparation of Upanaha:- First add 50 ml of *Tila Taila* to the frying pan, to this add grated coconut & sliced lemon juice and fry till it turns into tinged brown. Then add *Saindhava Lavana*, *Methika Churna* & *Shatapushpa Churna*. These were well mixed. Add *Asthi Santhanak Churna* & *Dashanga Lepa* (which was soaked the night before in water). This was cooked on medium flame by adding a small amount of hot water frequently.

5.3 Criteria for assessment

- a) OSWESTRY LOW BACK DISABILITY QUESTIONNAIRE¹⁶: -

Table 6 Scoring of ODI

SCORE	DISABILITY LEVEL
0 - 4	No disability
5 - 14	Mild disability
15 - 24	Moderate disability
25 - 34	Severe disability
35 - 50	Completely disabled

- b) VISUAL ANALOGUE SCORE: -

Table 7 Scoring of VAS

0	No pain
2	Mild annoying pain
4	Nagging, uncomfortable, troublesome pain
6	Distressing, miserable pain
8	Intense, dreadful, horrible pain
10	Worst possible, unbearable, excruciating pain

c) SLR: - d) LASEGUE: - e) BRAGARD'S: -

Table 8 Scoring of SLR, Lasegue & Bragard's test

f)	0	90°
	1	60°
	2	30°
	3	0°

SYMPTOMS: -

Table 9 Scoring of symptoms

SYMPTOM	GRADUATION	GRADE
<i>Kati Shola</i> (Pain in lower back)	No pain	0
	Localized, recurrent, mild pain in the back	1
	Recurrent, mild but uncomfortable pain in the back	2
	Moderate but dreadful pain in the back	3
	Agonizing continuous pain in the back	4
<i>Kati Graha</i> (Stiffness in lower back)	Never	0
	Rarely	1
	A mild amount	2
	A moderate amount	3
	A severe amount	4
<i>Gamane Kastata</i> (Difficulty in walking)	No difficulty in walking	0
	Pain restricts walking more than 1 mile	1
	Pain restricts walking more than ½ mile	2
	Pain restricts walking more than ¼ mile	3
	Unable to walk	4
<i>Gridhrasivat Pida</i> (Radiation of pain)	No radiating pain	0
	Radiation of pain up to <i>Sphik, Kati, Prushtha, Uru, and Janu Pradesa</i> of one leg or pain radiating up to <i>Uru Pradesha</i> in both legs	1
	Radiation of pain up to <i>Sphik, Kati, Prushtha, Uru, Janu, and Jangha Pradesa</i> of one leg or pain radiating up to <i>Janu Pradesha</i> in both legs	2
	Radiation of pain up to <i>Sphik, Kati, Prushtha, Uru, Janu Jangha, and Pada</i> of one leg or pain radiating up to <i>Jangha Pradesha</i> in both legs	3

	Radiation of pain up to <i>Sphik, Kati, Prushtha, Uru, Janu, Jangha,</i> and <i>Pada</i> of both legs	4
<i>Sparsha Asahyata</i> (Tenderness in lower back)	Not at all a problem	0
	Occasionally	1
	Minor problem	2
	Moderate problem	3
	Serious problem	4

6. Result:-

Table 10 Comparison of scoring before & after treatment

TEST	BEFORE TREATMENT		AFTER TREATMENT	
ODI score	47		13	
VAS score	08		00	
SLR test	Rt. – 03	Lt. – 01	Rt. – 01	Lt. – 00
Lasegue test	Rt. – 03	Lt. – 01	Rt. – 01	Lt. – 00
Bragard's test	Rt. – 03	Lt. – 01	Rt. – 01	Lt. – 00
Symptoms	08		01	

7. Discussion: -

Katigraha though not mentioned directly by our *Acharya's* except *Gada-nigraha Vata Vyadhi Adhikara*.¹⁷ The disease invariably comes under the umbrella of *Vata Vyadhi*. In *Vataj Nanatmaja Vayadhis*, *Katigraha*; *Prista graha*, and *Sronibeda* are mentioned as separate diseases, depending on the region where the pain is felt. The prime exhibition of *Vata* Vitiating is Pain which is known as *Shula* in Sanskrit.” *Vatadrite Rujah Nasti*”.¹⁸ This Pain is a standard criterion for disease. *Kati* is one of the *Sthana* of *Apana Vata*. In *Katigraha*, *Vata dosha* is vitiating by its *Ruksha Guna* and *Kapha* by its *Sheeta Guna*. This Vitiating *Guna* can be best controlled by opposite *Guna Chikitsa*.¹⁹ *Agnivesha* has stated that *Sneha & Sweda* are *Chikitsa* for *Vata Vyadhis*. The *Ruksha* and *Sheeta Guna* of vitiating *Vata* and *Kapha Dosha* are balanced by *Snigdha & Ushna Guna* of *Snehana & Swedana*. This patient has a sedentary lifestyle and there may be some chances of wrong sitting style at work which results in *Katigraha*. *Snehana & Swedana* is very much effective in this patient by decreasing *Katishula* and *Katigraha*.

Katibasti is a *Snehayukta Sweda Basti* procedure, which helps to decrease low back aches, alleviates numbness due to nerve compression & strengthens back muscles which maintain normal curvature of the spine, bone & tissues. The local rise in temperature & circulation due to the dilatation of capillaries at the terminal region leads to the contraction of internal vessels. Their blood is drawn towards the periphery finally promoting

phagocytosis and also combating the inflammatory process. Draining of excessive fluid through lymphatics also takes place. *Prachala Taila* contains a mixture of *Kottamcukkadi Taila* (*Kushtha, Ardraka, Vacha, Shigru, Rasona, Devdaru, Sarshap & Suvaha*), *Tarapin Taila & Tailaparna Taila*.

Ingredients of *Patra Pinda Sweda* i.e, leaves of *Nirgundi, Eranda, Chinchu, Dhatura, Shigru, Arka*, etc., Grated coconut, Lemon, *Saindhava, Rasna, Shatapushpa, Methika & Tila Taila & Upanaha Sweda* i.e, Coconut grating, *Saindhava Lavana, Methika Churna, Shatapushpa Churna, Asthi Santhanak Churna, Dashanga Lepa*, Lemon, *Tila Taila* are having Vata-hara & pain-relieving properties.

Rasarajeswar Rasa is formulated with *Suvarnayukta Rasaraja Rasa, Shuddha Vishamushti, Ashwagandha, Rasasindoor, Guggulu*, and other ingredients that support overall health and wellness. It has antioxidant and anti-inflammatory properties that protect the body against free radicals and oxidative damage. It helps reduce the pain, swelling, stiffness, and inflammation in the joints and muscles.

8. Conclusion:

- Vata & Kapha doshas are vitiated due to an increase in *Ruksha* and *Sheeta Guna*, which causes pain and stiffness.
- There is a vitiation of *Vata Dosha* in *Katigraha*.
- *Kati Basti, Patra Pinda Swedana & Upanaha Sweda* show a Significant effect on Vitiating *Vata & Kapha* in *Katigraha*.

In this case study, special emphasis is given to the *Panchakarma* therapies like *Kati Basti, Patra Pinda Swedana & Upanaha Swedana* along with *Shamana* medicine effectively relieved the *Katigraha* (Lower Back Pain) and its associated complaints. *Kati Basti, Patra Pinda Swedana & Upanaha Swedana* have their action in each stage of the disease because after each of these procedures patient got significant relief in his complaints. The *Shamana* medicine given along with *Panchakarma* therapies effectively pacified the remaining *Dosha* and prevented the recurrence of the disease. It is an oriented treatment.

8.1 Limitations: The main limitations of the study were a lack of radiological findings after the treatment and a limited number of follow-ups. More follow-up reviews were needed to assess the sustainability of the results.

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