



## A Critical Analysis On The Ayurvedic Aspect Of Katigraha (Low Back Pain): A Successful Case Study

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**Abstract:** A frequent condition affecting the back's muscles, nerves, and bones is low back discomfort. Pain might range from a continual dull sensation to a sudden acute sensation. Low back pain affects approximately 60 to 85% of adults during some point of their life. *Katigraha* indicates a disease condition of the lower back associated with pain, stiffness, and restricted movements. A condition when pure *saam vayu* reaches *kati Pradesh* and produces pain is known as *katigraha*. In *Ayurveda samhitas*, *katigraha* has been mentioned as both *anubandha* and *anubandhya vyadhi*. It can be correlated with Lumbar Spondylosis due to similarity of clinical manifestations. Lumbar spondylosis is a degenerative condition that develops gradually over time, being more common in older individuals. Contemporary medicine has its own limitations giving only short-term relief in pain or surgical intervention with side effects. So this single case was taken to demonstrate the effects of ayurvedic treatment modality. After a month, the patient's symptoms were assessed, and the results were satisfactory. The patient's general quality of life had also greatly improved.

**Keywords:** Katigraha, panchakarma, katibasti, kala basti, low back pain, lumbar spondylosis

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## Introduction

### According to Gadanigraha

वाय कटुःयाश्रितुः श दधुःसामोवा जनयेद्रजम्।कश्रटग्रहुः  
सश्रवज्ञेयुःपन सक्थिद्वयाश्रितुः ॥१६० ॥

A condition when pure *saam vayu* reaches *kati Pradesh* and produces pain is known as *katigraha*. *Katigraha* indicates a disease condition of the lower back associated with pain, stiffness, and restricted movements. Lower back discomfort caused by spondylosis is a significant clinical, social, economic, and public health issue that affects the whole world's population. Long periods of sitting, a poor diet, a lack of exercise, and stress are the primary causes of low back pain in today's society. With the changes in lifestyle, low back ache is a very common complaint now-a-days in every age group. One of the main causes of low back ache is the intervertebral disc prolapse. In 95% of the lumbar disc herniation, L4-L5 and L5-S1 discs are most affected. It can happen suddenly or gradually over time from repetitive movements. Low back pain caused by spinal degeneration and injury. Conditions linked to back pain include:

- Muscle or ligament strain
- Bulging or ruptured discs
- Arthritis
- Osteoporosis

The pathophysiology of *Katigraha* is mostly influenced by *Vata* and *Kapha*. In this case, the disease's pain and stiffness are two symptoms that are caused by the *Vata* and *Kapha* *Doshas*. *Katigraha* is one of the *Vatavyadhis*, according to *Gadanigraha*. It blatantly implies that *Vata* *Dosha* is the primary cause of the whole pathophysiology associated with *Katigraha*. He says that the *Kati Pradesh* is where the *ashraya* of the vitiated *shudha* or *samavayu*, which causes pain and stiffness, takes place.

In *Ayurveda*, *samanya vatavyadhi nidana* for *Katigraha* are :

- Consumption of light, dry, cold, and insufficient food.
- Excessive sex and insomnia.
- Ineffective therapies such as prolonged fasting, swimming, or walking.
- Excessive physical activity and exercise.

- Anxiety, sadness, and crippling illnesses.
- Using uncomfortable mattresses or chairs
- Anger, daytime sleep, repressing desires that come naturally, indigestion, trauma, and not eating.
- Vital organ damage, collisions with moving objects, riding horses or camels, etc.

This whole situation aggravates *vata*. This fills up the body's empty channels and causes a variety of generalized or specific illnesses.

### Samprapti

*Vata* and *Kapha* are the two main factors involved in the pathogenesis of *Katigraha*.

**Table 1.** Factors in the pathogenesis of *Katigraha*

1	Dosha	Vata Kapha	Apana, vyana (vridhi) Sleshaka, avalambaka (kshaya)
2	Dushya	Dhaatu Updhaatu	Rasa, Asthi Kandara, Snayu
3	Udbhavasthaana	Pakwashaya	
4	Vyaktasthaana	Kati	
5	Marga	Madhyama roga marga	
6	Strotas	Rasavaha, Asthivaha, Purishavaha	
7	Strotodushti	Sanga	
8	Agni	Mandya	

The following are the main signs of *katigraha*:

- *Shoola*, a type of pain that can be intense, searing, or dull.
- *The sama vayu* movement in *Kati* (the lumbar region) causes muscular spasms that result in *stambha* (stiffness) in this area as well.

The overall deterioration of the spine, which can affect the joints, discs, and bones of the spine, is referred to as spondylosis. It is a deteriorating disorder that can get worse as people age and can affect any part of the spine, including:

- Cervical — neck
- Lumbosacral — low back/sacrum
- Lumbar — low back
- Thoracic — upper, mid-back

Degeneration of the lumbar vertebrae is one way to characterize lumbar spondylosis. The discs and vertebrae of the lower back are deteriorating due to ageing. Osteoarthritis and degenerative disc disease are common names for these alterations.

## Aim and Objectives

This study's objective was to evaluate the effectiveness of Ayurvedic treatment, including Shodhana and Shamana Chikitsa, in katigraha.

## Material and Methods

For this study, patient of *katigraha* was registered from OPD of *Kayachikitsa* Department and admitted in female IPD of PKLS Govt. Ayurveda Hospital, Bhopal. The allopathic medicines were stopped during the study period. The registered patient was informed regarding the procedures that she would undergo and was admitted in the hospital.

The drugs required for *Panchakarma* procedures were procured and prepared in *Panchakarma* in PKLS Govt. Ayurvedic Hospital, Bhopal. The duration of the study was one month.

## Case Study

A 35-year-old female patient presented with the complaints of pain in lumbar region and stiffness in left leg. She took modern medicines too, but did not get any relief. So, for further treatment she came to PTKLS Govt. Ayu. Hospital & Institute Bhopal.

The pt. was admitted in PTKLS Govt. auto Ayurveda college and institute Bhopal.

### H/o Present Illness

According to the pt. she was alright 7 months back, then she started feeling pain in lower back and stiffness in left leg. She presented the symptoms of lower back ache, stiffness, and difficulty in walking due to pain.

### Past History

There was no any h/o of DM, HTN or any other major illness or surgery in the past.

**Table 2.** Personal history

Occupation	housewife
Appetite	normal
Bowel	clear
Sleep	disturbed due to pain
Micturition	normal
Allergy	none
Addiction	none

### General Examination

The observations in the general examination are as follows:

- Pallor, icterus, cyanosis, clubbing & oedema – Absent
- BP= 124/80 mmHg
- Pulse – 70/min
- Spo2 and all vitals were stable.

The observations in the systemic examination are shown in table 3 and the lab examination are in table 4.

**Table 3.** Systemic examination

R. S	Bilateral lungs sound clear
CVS	Normal
P/A	Normal
CNS	Pt. was conscious and well oriented.

**Table 4.** Lab investigations

Hb %	12.9 gm %
Serum uric acid	5.4 mg/dl
Random blood sugar	101.2 mg/dl

### Assessment Criteria

The assessment criteria for the study of the selected patient are as follows:

- *Ruka* (Pain)
- *Stambha* (Stiffness)
- *Suptta* (Numbness)
- ODI ( Oswestry disability Index )

**Table 5.** *Ruka* (pain)

Grade	Pain
0	No pain
1	Mild pain but no difficulty in walking
2	Moderate pain and slight difficulty in walking
3	Severe pain with severe difficulty in walking

**Table 6.** *Stambha* (Stiffness)

Grade	Stiffness
0	No stiffness
1	Sometimes for 5-10 min
2	Daily for 10-30 min
3	Daily for 30-60 min / more than 1 hr

**Table 7.** *Suptta* (Numbness)

Grade	Numbness
0	No numbness
1	Paresthesis
2	Severe paresthesis

3	Intolerable paresthesia
4	Paralysis

**Table 8(a).** ODI (Oswestry disability Index)**SECTION 1 - PAIN INTENSITY**

- I have no pain at the moment.
- The pain is very mild at the moment.
- The pain is moderate at the moment.
- The pain is fairly severe at the moment.
- The pain is very severe at the moment.
- The pain is the worst imaginable at the moment.

**SECTION 2 - PERSONAL CARE (washing, dressing etc.)**

- I can look after myself normally, without causing extra pain.
- I can look after myself normally, but it is very painful.
- It is painful to look after myself and I am slow and careful.
- I need some help, but manage most of my personal care.
- I need help every day in most aspects of self-care.
- I do not get dressed, wash with difficulty and stay in bed.

**SECTION 3 - LIFTING**

- I can lift heavy weights without extra pain.
- I can lift heavy weights, but it gives extra pain.
- Pain prevents me from lifting heavy weights off the floor, but I can manage if they are conveniently positioned (e.g., on a table).
- Pain prevents me from lifting heavy weights but I can manage light to medium weights if they are conveniently positioned.
- I can lift only very light weights.
- I cannot lift or carry anything at all.

**SECTION 4 - WALKING**

- Pain does not prevent me walking any distance.
- Pain prevents me walking more than 1 mile.
- Pain prevents me walking more than ½ of mile.
- Pain prevents me walking more than 100 yards.
- I can only walk using a stick or crutches.
- I am in bed most of the time and have to crawl to the toilet.

**SECTION 5 - SITTING**

- I can sit in any chair as long as I like.
- I can sit in my favourite chair as long as I like.
- Pain prevents me from sitting for more than 1 hour.
- Pain prevents me from sitting more than ½ an hour.
- Pain prevents me from sitting more than 10 minutes.
- Pain prevents me from sitting at all.

**Table 8(b).** ODI (Oswestry disability Index)**SECTION 6 - STANDING**

- I can stand as long as I want without extra pain.
- I can stand as long as I want but it gives me extra pain.
- Pain prevents me from standing for more than 1 hour.
- Pain prevents me from standing for more than ½ an hour.
- Pain prevents me from standing for more than 10 minutes.
- Pain prevents me from standing at all.

**SECTION 7 - SLEEPING**

- My sleep is never disturbed by pain.
- My sleep is occasionally disturbed by pain.
- Because of pain, I have less than 6 hours of sleep.
- Because of pain, I have less than 4 hours of sleep.
- Because of pain, I have less than 2 hours of sleep.
- Pain prevents me from sleeping at all.

**SECTION 8 - SEX LIFE (if applicable)**

- My sex life is normal and causes no extra pain.
- My sex life is normal but causes some extra pain.
- My sex life is nearly normal but is very painful.
- My sex life is severely restricted by pain.
- My sex life is nearly absent because of pain.
- Pain prevents any sex life at all.

**SECTION 9 - SOCIAL LIFE**

- My social life is normal and causes me no extra pain.
- My social life is normal, but increases the degree of pain.
- Pain has no significant effect on my social life apart from limiting my more energetic interests, e.g., sports, etc.
- Pain has restricted my social life and I do not go out as often.
- Pain has restricted my social life to my home.
- I have no social life because of pain.

**SECTION 10-TRAVELLING**

- I can travel anywhere without pain.
- I can travel anywhere but it gives extra pain.
- Pain is bad but I manage journeys over 2 hours.
- Pain restricts me to journeys of less than 1 hour.
- Pain restricts me to short necessary journeys under 30 minutes.
- Pain prevents me from travelling except to receive treatment.

**MRI scan of Lumbosacral Spine**

The observation of the MRI scan are as follows:

- Diffuse posterior bulge with posterior protrusion of L4-5 disc, indenting thecal sac.
- Bilateral facet arthropathy at L4-5 level.

The MRI scan report of a patient and the film is shown in figure 1 a and b.

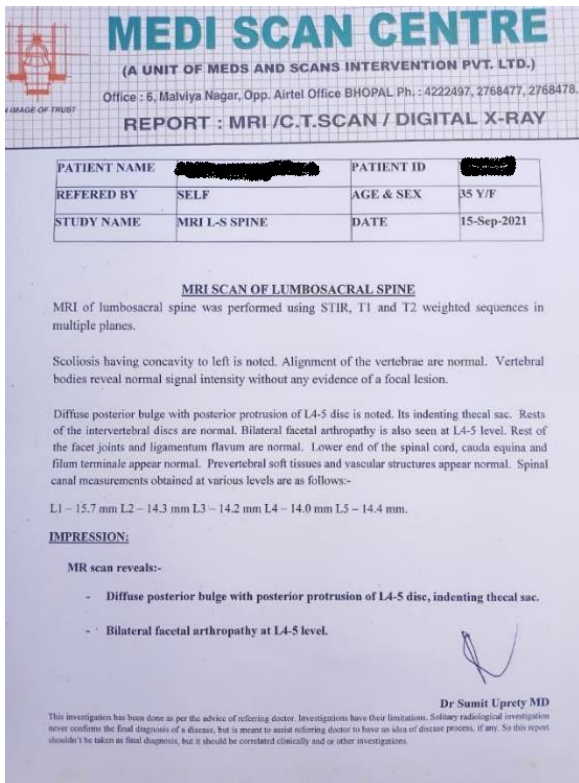


Figure 1(a). MRI L-S SPINE report of a patient



Figure 1(b). MRI L-S SPINE film of patient

Table 9. Treatment Regimen

Punarnavadi guggal	2 BD
Rasna saptak kwath	20 ml BD
Shivakshara pachan churna	5 gm HS
Kati basti	Narayan taila
Kala basti -Niruh basti- dashmooladi kwath	Anuwasana basti - Narayan taila
Physiotherapy	

## Results

The results of the study on the selected registered patient are as follows:

- After treatment there was marked relief in LBA and STIFFNESS.
- was able to walk more freely.
- Walking time increased.

Table 10. Basti retention time of Kala Basti Plan

Day	Date	Basti	Aadana kala	Pratyaga mana kala	Retention time
1	17/09/2021	Anuvasana	11:00 a.m.	11:20 p.m.	20 min
2	18/09/2021	Anuvasana	11:15 a.m.	01:00 p.m.	1 hr 45 min
3	19/09/2021	Niruha	09:40 a.m.	10:00 a.m.	20 min
4	20/09/2021	Anuvasana	11:00 a.m.	12:40 p.m.	1 hr 40 min
5	21/09/2021	Niruha	10:00 a.m.	10:15 a.m.	15 min
6	22/09/2021	Anuvasana	10:30 a.m.	12:15 p.m.	1 hr 45 min
7	23/09/2021	Niruha	09:20 a.m.	09:45 p.m.	25 min
8	24/09/2021	Anuvasana	11:00 a.m.	01:20 p.m.	2 hr 20 min
9	25/09/2021	Niruha	09:00 a.m.	09:15 a.m.	15 min
10	26/09/2021	Anuvasana	10:00 a.m.	11:00 a.m.	1 hr
11	27/09/2021	Niruha	09:10 a.m.	09:30 a.m.	20 min
12	28/09/2021	Anuvasana	10:00 a.m.	12:10 p.m.	2 hr 10 min
13	29/09/2021	Niruha	10:00 a.m.	10:20 a.m.	20 min
14	30/09/2021	Anuvasana	10:15 a.m.	01:45 p.m.	3 hr 30 min
15	1/10/2021	Anuvasana	10:00 a.m.	02:00 p.m.	4 hr
16	2/10/2021	Anuvasana	11:00 a.m.	01:45 p.m.	2 hr 45 min

Table 11. Change of reading in pain, stiffness and numbness

Sign of symptoms	Before treatment	After treatment
Pain	3	1
Stiffness	3	1
Numbness	0	0

Table 12. Change of reading in different activity symptoms

Sign of symptoms	Before treatment	After treatment	Result in %
Walking	3	1	80
Personal care	3	1	80
Social life	3	1	80

Sex life	-	-	-
Pain intensity	5	1	80
Lifting	4	2	70
Sitting	3	1	80
Standing	4	0	100
Travelling	4	1	80
Sleeping	2	0	100
Total	31	8	83.33 %

## Discussion

**Punarnavadi Guggulu** – Punarnavadi guggulu contains mainly *punarnava*, *erandamoola*, *shunthi*, *guggulu*, *eranda taila* etc. which possess *vata-kaphahara*, *shoolahara* and *anulomaka* properties along with anti-inflammatory, analgesic, muscle relaxant properties and even regenerative properties which gives relief from the disease.

**Rasnasaptaka Kwatha** – Rasnasaptaka kwatha possess an excellent *vata shamaka* property. It has the following contents *rasana*, *amrita*, *aaraghwadh*, *devdaru*, *trikantaka*, *punarnava*, etc. having the property anti-inflammatory, analgesic, anti-arthritis.

**Shivakshara Pachan Churna** – Vata and Pitta's digestive processes are normalized. The food that has been consumed is properly absorbed and assimilated. Rich in carminative and anti-spasmodic herbs, it quickly relieves gassiness and biliousness.

**Kati basti with Narayana Taila** – Kati basti is a type of *snigdha swedana*. Application of *kati basti* was carried out in order to provide nourishment and strength to the affected area. Here due to degeneration of inter-vertebral disc and affected function of *Shleshaka kapha*, results in irritation and compression. The combination of *kati basti* and *Narayana taila*, which combines the benefits of both *snehana* and *swedana*, helps lubricate the local muscle and tissues of the adjacent afflicted area and also enhances local blood flow, which aids in draining the inflamed exudates.

**Dashmooladi Niruha basti followed by Narayana tail Anuvasana basti** – According to *Acharya Charaka*, *basti* is the best treatment for *vata dosha*. Since the active ingredients in *basti* preparation are absorbed by the *Pakwashaya* (intestine) and subsequently distributed to numerous bodily channels. It gets to the diseased area, causes affect throughout the body, and provides alleviation. Basti acts on the primary location of *vata dosha*, *pakwashaya*

, and aids in the removal of the *Avarana* of *kapha* over *vata* caused by protrusion. It helps in relieving constipation, odema, inflammation and necrosis due to its *strotoshodhana* effect. *Dashmool* is a *tridosahara* drug. *Guduchi* possesses *vedanasthapana*, *vataghna* action due to *snigdha* and *ushna gunas*. Due to its *ushna virya* and *shothahara* characteristics, *Punarnava* possesses *kapha-vataghna* activity. The effects of *anuvastana vasti* with *narayana taila* permeate the body and reach subtle pathways.

## Conclusion

Katigraha is considered as one of the Vata Nanatmaj vikara. The principal symptom of katigraha, low back pain, is relatively common nowadays owing to a mechanical lifestyle, despite the fact that it is not extensively mentioned in Ayurvedic writings. It is a relatively typical ailment. It may occur instantly or gradually over time as a result of repeated motion. Long periods of sitting, a poor diet, a lack of exercise, and stress are the primary causes of low back pain in today's society. As a result, one should be aware of the causes and symptoms before treating.

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