

A CRITICAL ANALYSIS ON THE AYURVEDIC ASPECT OF KATIGRAHA (LOW BACK PAIN):A SUCCESSFUL CASE STUDY

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ABSTRACT

Low back pain is a common disorder involving the muscles, nerves, and bones of the back. Pain can vary from a dull constant to a sudden sharp feeling. 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. Symptomatic assessment of patient was carried out after one month and satisfactory outcome was there and overall quality of life of patient was significantly improved.

KEYWORDS: *katigraha*, *panchakarma*, *katibasti*, *kala basti*, low back pain, lumbar spondylosis.

INTRODUCTION

According to Gadanigraha

➤ वायुः कट याश्रितः शुद्धः सामो वा जनयेदुजम् । कटिग्रहः स विज्ञेयः पनुः सक्थिद्वयाश्रितः ॥ 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. Spondylosis is a form of lower back pain and is an important clinical, social, economic, and public health problem affecting the worldwide population. In modern lifestyle due to long sitting hours, unhealthy diet, lack of exercise and stress are the main cause of low back pain.

With the changes in life style, low back ache is 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

Vata and Kapha are the two main factors involved in the pathogenesis of *Katigraha*. Here the pain and stiffness are two symptoms present in the disease which can be attributed to the *Vata and Kapha* Dosha. *Gadanigraha* considers *Katigraha* to be one among the *Vatavyadhis*. It clearly projects *Vata Dosha* as the major factor behind the whole pathogenesis involved in *Katigraha*. He explains that the vitiated *shudha or samavayu* takes its *ashraya* in the *Kati Pradesh* causing pain and stiffness.

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

- Intake of dry, cold, deficient and light food.
- Excessive sex and sleeplessness.
- Improper treatments, by excessive fasting, swimming, walking.
- Excessive exercising and physical activity.
- Worrying , grief, debilitating diseases.
- Usage of uncomfortable beds or seats

- Anger, day sleep, suppression of natural urges, indigestion, trauma, abstaining from food
- Injury to vital areas, falling from fast moving vehicles, horse / camel riding etc. Due to all this condition *vata* is aggravated. This gets filled in the vacuous channels in the body and leads to various generalized or localized disorders.

Samprapti

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

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

The dominant symptoms of *Katigraha* are

- *Shoola* (pain) which may be dull, burning or sharp.
- *Stambha* (stiffness) also occurs due to muscle spasm produced by *sama vayu* movement in *Kati* (Lumbar region).

Spondylosis describes the general degeneration of the spine that can occur in joints, discs, and bones of the spine. It is a degenerative condition that may worsen as a person grows older, and can affect any region of the spine, including.

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

Lumbar spondylosis can be described as a degeneration of the lumbar vertebrae. It is an age-related degeneration of the vertebrae and disks of the lower back. These changes are often called degenerative disk disease and osteoarthritis.

AIM AND OBJECTIVES

The aim of this study was to access the efficacy of Ayurvedic management 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 properly 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.

Personal History

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

General Examination

- ▶ Pallor, icterus, cyanosis, clubbing & oedema – Absent
- ▶ BP= 124/80 mmHg
- ▶ Pulse – 70/min

- Spo2 and all vitals were stable.

Systemic Examination

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

Lab investigations

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

Assessment Criteria

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

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

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

Suptta (Numbness)

Grade	Numbness
0	No numbness
1	Paresthesia
2	Severe paresthesia
3	Intolerable paresthesia
4	Paralysis

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.

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.

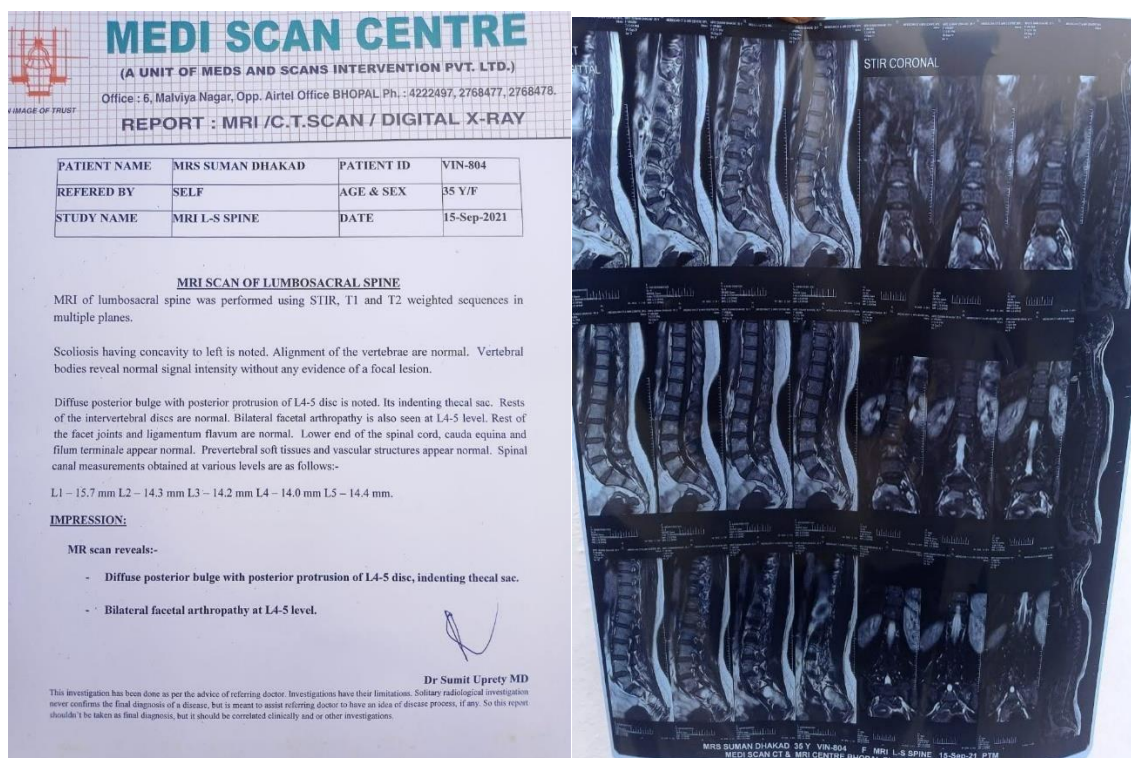
SECTION 10-TRAVELLING

- ☐ 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

MRI scan reveals –

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



Treatment Regimen

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

RESULTS

- ▶ After treatment there was marked relief in LBA \$ STIFFNESS.
- ▶ Pt. was able to walk more freely.
- ▶ Walking time increased.
- ▶ Basti retention time of Kala Basti Plan.

Day	Date	Basti	Aadana kala	Pratyagamanakala	Retentiontime
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.	01/10/2021	Anuvasana	10:00 a.m.	02:00 p.m.	4 hr
16.	02/10/2021	Anuvasana	11:00 a.m.	01:45 p.m.	2 hr 45 min

Sign \$ symptoms	Before treatment	After treatment
Pain	3	1
Stiffness	3	1
Numbness	0	0

Sign \$ symptoms	Before treatment	After treatment	Result in %
Pain intensity	5	1	80
Personal care	3	1	80
Lifting	4	2	70
Walking	3	1	80
Sitting	3	1	80
Standing	4	0	100
Sleeping	2	0	100
Sex life	-	-	-
Social life	3	1	80
Travelling	4	1	80
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 - It normalizes functions of digestive *pitta* and *vata*. It corrects indigestion, absorption, and assimilation of ingested food. It is Rich compound of carminative and anti-spasmodic herbs that provides quick relief in gaseousness 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 compression and irritation. *Kati basti with Narayana taila* is a combination in which, properties of both *snehana* and *swedana* are incorporated, which helps in lubricating local musculature and tissues of nearby affected region and also increases local blood flow which helps to drain out 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 principles of *basti* preparation are absorbed through *Pakwashaya* (intestine) and then spread to various channels of the body. It reaches the site and induces systemic effects and gives relief in the disease. *Basti* helps in removing the *avarana of kapha* over *vata* due to protrusion as well as it acts on *vata dosha* i.e. *pakwashaya*, which is the prime site of *vata dosha*. It helps in relieving constipation, edema, inflammation and necrosis due to its *strotoshodhana* effect. *Dashmool* is a *tridoshahara* drug. *Guduchi* possess *vedanasthapana*, *vataghna* action due to *snigdha and ushna gunas*. *Punarnava* possess *kapha-vataghna* action due to its *ushna virya* and has *shothahara* properties. *Anuvasana vasti* with *narayana taila* gets absorbed and spread throughout the body up to subtle channels.

CONCLUSION

Katigraha is considered as one of the *Vata Nanatmaj vikara*. *Katigraha* is not described elaborately in Ayurveda texts, in present era, due to mechanical lifestyle, the prevalence of its main symptom in low back is very high. It is a very common condition. It can happen suddenly or gradually over time from repetitive movements. In modern lifestyle due to long sitting hours, unhealthy diet, lack of exercise and stress are the main cause of low back pain. So, one should know the causes, symptoms, and then treat accordingly.

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