

KATIGRAHA-AN UNDERSTANDING THROUGH NIDANA

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India.**ABSTRACT**

Katigraha is one among the *Vataja Nanatmaja Vyadhi* which simulates with the signs and symptoms of Low Back pain. It continues to be the most common health concern for which patients seek primary care therapy. Our Acharyas explains *Katigraha* as a *Lakshana* in various *Vatavyadhi* and in other diseases. Here, *Katigraha* indicates a disease condition of the back associated with pain and stiff movements. Hence in this context *Kati Graha* denotes a group of symptoms characterized by the restriction of movements of *Kati* (lumbar) region in which pain would be a main feature as *Graha* alternatively means pain as restriction is said to produce pain in the particular region. The backache or lumbago is one of conditions which results from violation of bio mechanics of spine as it results when the physical and mental strain and faulty postures alter anthropometrical precision. As the back

pain is very subjective in nature, there are very few objectives finding in history, clinical examination and even on extensive radiological or laboratory investigation. Hence, there is a need to frame a protocol for evaluating the etiopathogenesis of *Katigraha* through various *Nidanas* like *Aharaja*, *Viharaja*, *Manasika* and *Kalaja Nidanas*.

KEYWORDS: *Katigaraha*, Low backache, *Aharaja Nidana*, *Viharaja Nidana*, *Manasika Nidana*, *Kalaja Nidana*.

INTRODUCTION

Vata is one among the *Tridosha*^[1] and it is the most basic component of the living organism and it is said to be the superior most in all aspects for every action or movement. In our classics, there are 80 types of *Vataja Nanatmaja Vyadhis* and *Katigraha* is one among

them.^[2,3,4] The word *Katigraha* having pain and restricted movements or stiffness.^[5] The vitiated *Vata* gets lodged in *Katipradesha* and produces this condition. Hence etiological factors of *Vata vyadhi* enlisted in literature, *Ativyayama*, *Ativicheshtita*, *Dukkha shayyasana*, *Ati adhwa*, *Sheeghrayana*^[6] etc. may have a definite relation with *Katigraha*. The lumbar region is a common site of a number of developmental deformities, causing symptoms ranging from simple backache to serious paralytic manifestations. The backache or lumbago is one of the conditions which results from violation of bio mechanics of spine as it results when the physical and mental strain and faulty postures alter anthropometrical precision. Low back pain affects 80% of individuals and degenerative changes of the spine is the most common cause. Majority of patients with acute low back pain have a good prognosis and most episodes resolving spontaneously in a few weeks and do not require any radiological or laboratory tests. The psychological factors (Anxiety, stress, depression, etc.) and occupational factors (manual material handling, bending and twisting, etc.) may also play an important role in the occurrence of chronic Low back pain.^[7] The changed lifestyle prolonged standing, sitting, travelling, continuous and over exertion provides at most physical strain and stress to the patient. The investigations are important to realise that the evident radiologic abnormalities may not be always responsible for back pain as it may be age related or incidental. Radiology plays a huge role in disease prognosis by giving physicians more options, tools and techniques for the proper diagnosis and treatment. The radiological armamentarium consists of basic screening with plain radiograph of lumbosacral spine and additional specialised investigations including CT, MRI, etc.

MATERIALS AND METHODS

Katigraha

Ancient *Acharya* have not described a specific disease as *Kati Graha* but the description of symptoms of the disease can be traced in some other conditions like *Kati Shula*, *Kati Vayu*, *Trika Shula*, *Prishta Shula*, and *Vatika Shula*. The disease invariably comes under the umbrella of *Vata Vyadhi*. *Charaka Acharya* has given detailed description of the types of *Vata*, properties, locations, functions, symptoms of provoked (vitiated) *Vata*, general and specific etiological factors, major manifestations and their management etc. *Prishta Graha* has been mentioned as a *Nanatmaja Vyadhi*^[8] of *Vata* along with its associated symptoms like *Pada Shula*, *Pada Suptata*, *Prishta Shula*, *Trika Shula*, etc. *Kati Shula* which is the cardinal symptom of *Kati Graha* has not been directly mentioned as a disease. *Charaka Acharya* has also given *Kati Shula* as a symptom in the description of *Gridhrasi* (Sciatica) the

radiating pain described in the classic is one of the major symptoms of Lumbar Spondylosis though it may present in many other diseases. Both the texts have mentioned *Kati Toda*, *Kati Bheda* as *Purvarupa* of *Vata Rakta*, *Prishta Ruka* and *Shroni Ruka* in *Sarvadhavavrita Vata*^[9] and *Kati Shula* as a disease caused by provoked *Vata* seated in *Pakvashaya*. *Trikagraha* has been mentioned as a symptom of *Ama Vata* and *Kati Stambha* as a symptom of *Anaha*. Though the direct references are rare, sufficient references can be found on the cardinal symptom of *Kati Shula*. *Vayu* is said to be responsible for all types of pain.^[10] *Kati Graha* as a separate disease entity has been mentioned for the first time in this *Gada Nigraha*. The chief complaint of *Kati Graha* is *Kati Shula* (Backache). *Vata* (*Saama* or *Niraama*) movement in to *Kati* and residing there produces the pain. *Trayodasanga Guggulu* and other preparations described by *Acharya Shodala* (author of *Gada Nigraha*) are similar to that of *Acharya Vrinda Madhava*.^[11] *Anjana Nidana* has mentioned *Kati Shula* as a symptom of *Vata Prakopa*(provocation). Further *Kati Vata* as a symptom is noted in *Gridhrasi*.^[12]

Low backache

The backache or lumbago is one of conditions which results from violation of bio mechanics of spine as it results when the physical and mental strain and faulty postures alter anthropometrical precision. The 70-80% of world population suffers from backache at some point of their life. As the back pain is very subjective in nature, there are very few objectives finding in history, clinical examination and even on extensive radiological or laboratory investigation.^[13] Considering the lacunae in pinpointing the exact cause of back pain and also due to the self-limiting nature of the most cases of LBP, it is advisable to rule out the specific causes of back pain (radiculopathy/systemic disease) as most the causes for back pain are nonspecific(mechanical) which are also called idiopathic LBP.^[14] The low back pain usually arises from one of the pain sensitive spinal structures but in majority of cases this pain is isolated without any localisation and without any neurologic deficits. The exact cause of pain could not be accurately discerned in majority of these cases and this group constitute up to 95 - 97% of all cases of low back pain.^[15] Acute low back pain, where the duration will be less than 1 month. Majority of patients with acute low back pain have a good prognosis and most episodes resolving spontaneously in a few weeks and do not require any radiological or laboratory tests.^[16] Patients either having insidious onset of low back pain or those who are not responded to 6 weeks of conservative management after acute or subacute low back pain. 'Yellow flag signs' which helps to identify patients at risk for chronicity or disability.^[17] The psychological factors (poor cognitive functioning, anxiety, stress, depression, distress, etc.)

and occupational factors (manual material handling, bending and twisting, whole body vibration, poor work relationships, social support and job dissatisfaction) may also play an important role in the occurrence of chronic Low back pain. A belief that the diagnosis is severe, e.g. cancer. Faulty beliefs can lead to ‘catastrophisation’ and avoidance of activity.

Aharaja nidanas

Katurasa

Excessive consumption of chilly, pepper and spicy foods increases the *Katu rasa* and finally *Vataprakopa* due to *Ruksha* and *Laghu Guna*. Frequent consumption of spicy foods could trigger upper GIT and may end up in indigestion, thereby produce *Ama* and it can lead to *Katigraha*. Very spicy foods can cause heartburn, making pain worse. The heartburn is another digestive disorder, if it is not treated properly causes pain in chest, throat and can radiate to lower back.

Tiktarasa

The consumption of coffee, cocoa, beer, bitter melon, broccoli, leafy spinach, etc increases *Tikta rasa* in the body. Excess bitter taste may produce toxicity leading to loss of appetite, lowers blood sugar, etc. This may be due to the *Ruksha*, *Laghu* and *Shita Guna* of *Tikta rasa* will cause *Prakopa* of *Vata Dosha*. The continuous usage of *Tikta rasa* causes *Sarva Dhatu Shoshana* and finally *Vata Dosha Prakopa*.

Rukshannasevana

Excessive consumption of *Yava*, *Laja*, etc. that increases *Ruksha Guna* and *Shitatwa* in the body and causes fainting, depletion and destruction of tissues and also produce *Vatavyadhis*. The *Ruksha Guna* produces *Rukshata*, *Katinya*, *Stambhana* and *Shoshana* of *Dhatus*, thereby leading to *Vatavridhi*. It produces dehydration in our body. Mainly it includes degenerative changes, musculoskeletal and neuromuscular diseases.

Shitannasevana

Usage of refrigerated food items in their home. Because refrigerating food items helps to prevent them from getting damaged and it preserves things for a long period. In the present era, refrigerator is one thing that they cannot live without. Cold food items cause various gut related problems like bloating, puffiness, cramps and also lowers body temperature. Thereby, reducing the flow and circulation of blood all over the body. The *Shitanna* produces *Stambhata* in the body and it is *Vata Vardhaka* by consuming ice creams, refrigerated food

items such as vegetables, fruits, soft drinks, instant products, etc. This may have an impact on muscles and bones in the low back.

Laghuannasevana

The individuals who are having light meals, juices in night time, and as a part of *Upavasa*, they were not consuming proper amount of food as they need. Daily consumption of light food might be not enough for the bodily activities. The *Laghuanna* will also provide *Ropana* and gives *Laghutwa* in the body. Intake of light food indicates quantity wise consumption of *Ahara*. It may lead to mental, physical and emotional health problems. The symptoms like reduced nourishments, sleep disturbances, constantly feeling cold, constipation, anxiety and weight loss. All these may have direct or indirect impact on low back pain.

Vishamasana

The *Apraptakala Bhojana* produces *Ama* which aggravates all the *Tridoshas*. The aggravated *Doshas* produce *Agnivaishamya* followed by *Ajirna*. *Atitakala Bhojana* were also seen in some patients as they do the suppression of hunger resulting into *Karshya*, *Vaivarnya*, body ache, etc. The *Karshya* and body ache are caused due to the improper nourishment to all body parts and this may lead to pain in low back.

Shushkamamsa

Those who are habituated to take Chipped beef (partially dried beef), Idiyirachi (traditional Kerala style), Kawaab (air dried, spiced meat), dried boneless salted mutton, etc and unhygienic meat. This increases dryness in the body. The dried meats are keeping after processing and preserved by curing, salting, smoking, drying or canning. People who are following unhealthy lifestyle are more prone to consume this type of meat.

Mudga

It helps to reduce the food intake, thereby lowers the weight. The oxalates which are present in the green gram accumulate in the body fluids and they may worsen the kidney and gall bladder disorder. So, this hampers the calcium absorption. The reduced calcium causes osteopenia, a reduction in the bone density. Over a period of time, osteoporosis develops and the bones become thin and more prone for fractures. It is having the properties of *Kashaya*, *Rukshta*, *Shitavirya* and *Laghutwa*, thereby causes *Vataprakopa*.

Masura

The excess consumption of *Masura* increases tannins, phytosterols, phenolics and phytic acid. Thereby, causes constipation, stomach upset, heart burn, flatulence, muscle aches and pain, weight loss and impairment in the mineral absorption by the presence of these chemical constituents. It is having the property of *Laghu*, *Shitavirya*, *Kashaya* and *Rukshata*.

Viharaja nidanas**Ativyayama**

Excessive exercise leads to *Shosha* and *Vataprakopa* leading to *Shoola*. *Ativyayama* gradually leads to *Krishata*, *Sarvadhatukshaya* and *Ojokshaya*, thereby *Vataprakopa* occurs. Excess physical activity causes muscles and ligaments in the low back to stretch too much and tear. This results into pain, stiffness and even muscle spasms in the back.

Langhana

Langhana brings *Laghutwa* to the body and thereby *Vataprakopa* happens. The *Langhana* mainly done by *Upavasa* by *Anasana* and *Alpabhajana*. Among these *Alpabhajana* in *Upavasa* is more seen in patients and this leads to starvation. Thereby the person will get less nutrition to the body and reduce the body weight.

Atyadhwa

Excessive walking causes *Vatavridhi*. Prolonged walking gives tear and strain to the muscles in the lower back, which leads to aches and pain. People who are having over weight are having high risk of muscle strain after prolonged walking.

Bharavahana

Bharavahana gives more pressure on *Sandhi* and *Mamsa* of lumbar spine and it leads to structural deformities in the vertebra causes *Vataprakopa*. Attempting to lift and twist with heavy loads cause intervertebral rupture in lumbar region. It gives compression on nucleus pulposus and leads to disc degeneration.

Dukhashayyasana and Dukhasana

Improper posture during sitting and sleeping causes discomfort in the *Katipradesha* and leads to *Katigraha*. Prolonged sitting makes the muscles in the back to become strained and painful, reducing the blood supply, slowly developing stiffness and weakness in the back and

trunk. Improper sleeping posture give more pressure on the spine and produce various disorders of spine.

Shighrayana

Shighrayana causes pain in *Sphik*, *Prishta*, *Kati*, *Vamkshana*, etc. Overusing of muscles and ligaments in the back can cause low back pain. After a long period, the lumbar spine and soft tissues become strained and inflamed, potentially leading to muscle spasms and pain.

Atijagarana

Ratrijagarana produces *Rukshata* in the body. Due to *Ruksha Guna* predominance, *Vata* get aggravated. Recent studies showing that, inadequate or interrupted sleep may worsen back pain. The lack of sleep shuts down the release of growth hormone. The night time release of growth hormone is necessary for relieving pain and healing the body. A lack of sleep prevents this process.

Vegadharana

Suppression of forceful expulsion of urges mainly *Mootra* and *Purisha* leads to *Prakopa* of *Vatadosha* especially *Apanavata*. And some patients do the *Vegadharanas* like *Adhovegadharana*, *Kshudhavega*, *Nidravega*, and *Shukravega Dharana* leads to *Angabhanga* due to *Vataprakopa*.

Divaswapna

In case of housewives, the *Divaswapna* is in the home itself in the form of lying position. Due to that, there is formation of *Ama*, and it obstruct the channels of *Vata*. In case of office workers, they were doing *Divaswapna* in sitting position and during travelling in vehicle due to their workload and stress. The sleeping during travelling and in sitting position give some discomforts in *Katipradesha*. Sleeping during daytime is *Abhishyandikara* which leads to *Margavarodha* in *Asthimajjavaha Srotas* in the *Katipradesha*.

Manasika nidanas

Nowadays the stressful life due to their work related and family related problems. It affects their mental health either in the form of *Chinta*, *Krodha* or *Bhaya*. *Katigraha* occurs in these patients by *Vataprakopa*. The *Manasika Nidanas* makes the person's body to lower the capacity to with strain the physical strain.

Kalaja nidanas

The *Kalaja Nidanas* or diurnal changes aggravate the severity of *Katigraha*. The muscles, tendons and ligaments that supports spine makes them tighten and contract when the cold season starts. In cold weather, the people were not doing the activities as compared to other seasons. This lack of activity leads to muscles in the back to weaken and results into back pain due to stiffness.

DISCUSSION

The *Aharaja Nidanas* like *Katu rasahara*, *Rukshanna*, *Shitanna*, *Laghuanna* and *Kharahara* were major supportive factors for the occurrence of low back pain, whereas *Tikta rasahara*, *Vishamasana*, *Shushkamamsa*, *Mudga* and *Masura* were minor supportive factors. The *Viharaja Nidanas* like *Langhana*, *Atyadhwa*, *Bharavahana*, *Dukhashayyasana*, *Dukhasana*, *Shighrayana*, *Atijagarana* and *Vegadhrana* plays a major role in the occurrence of *Katigraha*. Mainly the *Manasika Nidanas* like *Chinta*, *Bhaya* and *Krodha* make the person's body to lower the capacity to with stand the physical stress to decrease the body healing capacity. The *Kalaja Nidanas*, mostly they help in the aggravation of the condition in the form of pain and restricted movements due to diurnal changes. These causative factors can be considered under the *Nidanas* of *Katigraha* as explained in the Samhitas. In the present era changed food habits which includes less nutritious and more harmful foods like fast food, fermented foods, instant food preparation, cold items and junk foods are also giving support for the occurrence of the Low back pain. The changed busy life includes improper postures while sitting and lying position, prolonged standing, heavy lifting, works related travelling gives more stress on the lumbar spine. This leads to reduced blood supply and nutrition to the vertebrae are more prone for the degeneration, disc herniation, fractures and stenosis.

CONCLUSION

The *Katigraha* is a *Shoola Pradhana Vyadhi* due to aggravated *Vata Dosha* in the *Katipradesha*. The pain in the *Katipardesha* mainly starts when the *Asthikshaya* process occurs. Due the predominance of *Vataprakopa* and *Kaphaprakopa Nidanas*, *Vyana Vayu* gets obstructed in the *Katipardesha*, thereby *Shoshana* of *Shleshaka Kapha* happens and it leads to occurrence of *Katigraha*. In the chronic stage of *Katigraha*, the vitiated *Vata* hampers the normal circulation of *Rasa* and *Rakta Samvahana* in the *Katipradesha*. This will result into improper nourishment of the spine and *Akunchana Prasaraana Pravritti Sa Vedana* due to *Sthambhana*. The works related Low back pain is associated with exposure to ergonomic

stressors at work, physical, psychological and personal risk factors. The changed lifestyle, addictions, improper postures during their work, heavy lifting, reduced relaxation and food habits are also having an important role in the prevalence of Low back pain

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