

***KatyashritVata (Lumbar spondylosis) management with
AshwagandhaOilKatiBasti-locally &‘PanchatiktaGhritGuggulu’ internally.***

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Abstract:

Lumbar spondylosis is a age-related change of the vertebrae and discs of the lumbar spine and are commonly termed asdegenerative disc disease. It causes mild to severe symptoms such as back pain, restricted lumbar movement, stiffness , tingling sensation and weakness in lower extremities. Commonly, Analgesics, Anti-inflammatory drugs, Corticosteroids, Calcium supplements etc.are prescribed, however, in advanced stage patient may require surgery with varied prognosis. Based on resemblance in clinical features, the condition can be termed as*KatyashritaVata* in Ayurveda.

In the present clinical study, a specific Ayurvedic regimen - ‘*PanchtiktaGhritGuggulu*’- internally adjuvant to *Ashwagandha Oil Kati Basti*was given to patients diagnosed with *KatyashritVata*w.s.r. to Lumbar Spondylosis. The parameters observed were*Katishool* ,*Vedanayuktcheshta*,*Katigrah*,*Savedanacheshta*, *Chimchimayan* and *PaadDaurbalyata*. The efficacy of the treatment was assessed periodically andstatistical analysiswas doneto draw the conclusion.

The observations revealed that 79.23% patients got complete relief from ‘*Katishool*’. Further,88.55 % patients got relief from ‘*Savedanacheshta*’, 93.02% patients relieved from ‘*Katigrah*’, 62.87% patients relieved from ‘*Chimchimayan*’ and 58% Patients relieved from ‘*PaadDaurbalyata*’.

In this study, *PanchtiktaGhritGuggulu*- internally along with *Ashwagandha Oil Kati Basti* (Locally), revealed practically workable, effective and complication free treatment, proved statistically significant in the management of *KatyashritVata*with special reference toLumbar spondylosis.

Keywords: *KatyashritVata, PanchtiktaGhritGuggulu, Ashwagandha, Lumbar spondylosis*

INTRODUCTION:

KatyashritVata is mentioned as one of the *Vatavyadhi* in Charak Samhita under Eighty *NanatmajaVatavyadhichapter*.^[1] In Lumbar Spondylosis pathogenesis begins at the intervertebral discs and dehydration of discs results in reduction of inter vertebral disc space and peripheral osteophytes formation. In brief, it can be described as degenerative condition of the Lumbo-sacral spine observed mainly in individuals aged 30-60 years. This condition lead to symptoms such as pain in the low back, thighs, and/or legs, which radiates into the buttocks, muscle spasms, leg pain, or weakness, tight hamstring muscles, and irregular gait can be seen.^[2]

Based on resembling clinical features, the condition can be termed as *KatyashritVata*. Similar manifestation is observed in few other Ayurvedic pathologies like *KatiGraha, TrikaGraha, PrushtaGraha, Kati Vayu, TrikaShoola, PrushtaShoola, VatajaShoola, TrikaVedana, and Grudrasi*.^[3,4]

The common line treatment in modern medicine is Analgesics, Anti inflammatory drugs, Corticosteroids, Muscle relaxants, Calcium and Vitamin D supplements etc. Further, Lumbar Belt, Traction, and Physiotherapy is also advocated. However, these medicines have untoward effects if consumed for long period. The complication seen is Lumbar myelopathies or Canal Stenosis etc which require surgery like Laminectomy with varied prognosis^[5]

KatyashritVata can be treated by *Panchkarma* with medicated oil having *Vata* pacifying, and *Dhatuposhan* (rejuvenating) properties. Further, vitiated *Vata* located in Lumbar region, is best treated by *SthanikSnehanSwedan* (local oleation and fomentation) with drugs having *Vata & Kapha* pacifying properties.^[6,7]

Hence, this clinical study was conducted to evaluate the efficacy of *Ashwagandha Tail Kati Basti* (Luke warm medicated Oil) locally and '*Panchtikta Ghrita Guggulu*'-internally in the patients diagnosed with *KatyashritVata* (Lumbar Spondylosis). The combination treatment of Ayurveda Drugs internally along with and local *Katibasti* treatment showed remarkable improvement in symptoms of *KatyashritVata* s.r. to Lumbar Spondylosis.

Aim and Objective of the Study:

To assess the efficacy of '*Panchtikta Ghrita Guggulu*'- internally and *Ashwagandha Oil Kati Basti* (Locally), in the management of *KatyashritVata* s.r. to Lumbar Spondylosis.

Material and Method:

Study design-Open, Single Arm, non-comparative Clinical study

Sample Size-50 patients

Name of the Drug- *Panchtikta Ghrita Guggulu* (Internally) and *Ashwagandha Oil- Kati Basti*

Dosage & Time –

1. *Panchtikta Ghrita Guggulu* - 2 Tablet (Each 250 mg.) twice a day.
2. *Kati Basti*- 2 sittings (Each of 10 days) with Luke warm *Ashwagandha Oil*- at 10 days interval.

Criteria for Inclusion -

Subjects those are being diagnosed as to have Lumbar Spondylosis and fulfilling working definition of the study.

Sex- Male/Female. Age group- 30 to 60 years.

Exclusive Criteria-

Pott's spine, Scoliosis, Lumbar Spondylolisthesis, Ankylosing spondylosis, Canal stenosis,

Rheumatoid arthritis, Traumatic disc prolapsed, diabetic neuropathy -radiculopathy, Systemic Sclerosis

Investigations-

The investigations were done at base line & at the end of therapy.

X- Ray of Lumbo-Sacral spine AP/LAT view, CBC & ESR, Blood sugar.

Drug Profile:**PanchtiktaGhritGuggulu- Drug Ingredients & Processing ^[8]**

Nimb, Amrita, Vasa, Patol, Nidigdhika, water purified Guggulu, Murchhit Cow Ghee, Patha, Vidanga, Surdaru, Gajpipali, Yavkshar, Svarjikakshar, Shunthi, Haridra, Aniseeds, Chavya, Kushtha, Tejovati, Marich, Vatsaka, Dipyaka, Chitrak, Rohini, Arushkara, Vacha, Pippalimula, Manjishtha, Haritaki, Vibhitak, Amalaki, Yavani.

Process of Drug making, as per API, Part 2-(Formulations):

470 gm each of *Nimb, Amrita, Vasa, Patol & Nidigdhika (Kantakari)* taken. Coarsely powdered them together & boiled in water measuring 13 Liter. Reduced the liquid to one fourth of the original quantity. 240 gm of Purified *Guggulu* & 750 gm of *Murchhit Cow Ghrit* added to this decoction. After it is cooked; 12 gm each of the following -*Patha, Vidanga, Surdaru, Gajpipali, Yavkshar, Svarjikakshar, Shunthi, Haridra, Aniseeds, Chavya, Kushtha, Tejovati, Marich, Vatsaka, Dipyaka, Chitrak, Rohini, Arushkara, Vacha, Pippalimula, Manjishtha, Haritaki, Vibhitak, Amalaki & Yavani* added to it. The preparation stirred properly.

Ashwagandha Oil-

The raw *Ashwagandha* roots were dried and then made into coarse powder. 2.5KG of coarse powder was soaked in 40 Liters (16 times water) of water overnight. This was boiled till the decoction was reduced to 1/4th (10 Liters) and then filtered and kept aside. Thereafter, 2.5 Liter *Til* (sesame) oil is added and mixture was heated (slow flame) till the entire water evaporated to get medicated *Ashwagandha* Oil.

KatiBasti - Procedure

Firstly, gentle massage of Lower back and lower extremities with *Til* Oil & mild fomentation by *Nadiswed* (Fomentation by steam) is given to the patient. This is followed by covering the Lumbo-sacral spine with specially designed elliptical *Kati Basti* instrument and pouring of luke warm *Ashwagandha* Oil (Temp. 60⁰ C) filling 2/3rd of the *Kati Basti* instrument and kept for 20 minutes every sitting. Lastly, *Ashwagandha* Oil is removed by detaching instrument and area is cleaned with dry cotton swab.

PARAMETERS AND GRADATIONS FOR ASSESSMENT OF RESULTS**Table 1:** Showing parameters and gradation criterion^[9]

Parameter	Gradation					
	0	+	++	++	+++	++++
Kati Shool	No pain	Intermittent mild pain on neck movement	Continuous mild pain radiating to Hip region	Continuous moderate (bearable) pain radiating to Hip.	Continuous severe (non bearable) pain radiating to Hip & Lower limb	No pain
Mild = upto 6 hr Intermittent, Moderate = 8-12 hr, Severe = 24 hrs continues						
Savedana Cheshtha	Complete without pain	Complete with mild pain	Incomplete with mild (bearable) pain	Incomplete with moderate (bearable) pain	Severe pain with restricted movements	Complete without pain
Kati Grah	No stiffness	Mild stiffness along the neck	Mild stiffness along neck & shoulder	Moderate stiffness along Hip, Lower limb with painful lumbar movements	Severe stiffness with restricted lumbar movements	No stiffness
Chimchimayan	No numbness	Mild tingling sensation without numbness	Tingling sensation with Intermittent numbness	Continuous tingling numbness to toe	Severe tingling numbness to entire lower limb	No numbness
Paad Durbalyata	No weakness grade V muscle power	Mild weakness with grade IV muscle power	Moderate weakness with grade III muscle power	Moderate weakness with grade II muscle power	Severe weakness with grade I muscle power	Weakness in lower limb with grade V muscle power
Radiographic findings	Within normal	Early spondylot	Early spondylo	Moderate spondylolisthe	Severe spondylolisthe	Within normal

	limit	ic changes but no osteophytic changes	sis changes with osteophytic changes	sis	sis with PID with nerve root compression	limit
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OBSERVATIONAL ASSESSMENT OF THERAPY

Cured	Complete relief in both aspects (clinical symptoms as well as change in Radiograph)
Markedly improved	Complete relief in clinical symptoms but partial relief in Radiograph
Improved	Partial relief in both aspects
Failure	No relief in clinical symptoms as well as no change in Radiograph (X-Ray image)

Table 2: Showing Assessment of drug response in the clinical study

STATISTICAL ANALYSIS (by Wilcoxon-matched-pairs signed-ranks Test)

OBSERVATION AND RESULT

'*PanchtiktaGhritGuggulu*'- internally and *AshwagandhaOil Kati Basti* (Locally), showed significant result in the management of *KatyashritVata* s.r. to Lumbar Spondylosis

Symptoms such as *Katishool*, *Vedanayuktcheshta* and *Katigrah* were found in all the patients enrolled for the study. The observations revealed that 79.23% patients got complete relief from '*Katishool*'. Further, 88.55% patients got relief from '*Savedanacheshta*', 93.02% patients relieved from '*Katigrah*', 62.87% patients relieved from '*Chimchimayan*' and 58% Patients relieved from '*PaadDaurbalyata*'.

Further, patients with early onset and without *Chimchimayan* and *Daurbalyata* has better prognosis and faster recovery from symptoms. The complete relief observed at the end of *Kati Basti* treatment.

Furthermore, in the chronic patients (onset more than 1 year) having *Chimchimayan* and *PaadDaurbalyata* got relief on further treatment 2 sittings of *Kati Basti* along with palliative treatment for 3 months.

Symptom		Mean	SD	SE	Sum of all Signed Ranks	No. of Pairs	p
<i>Kati Shool</i>	BT	2.62	1.67	0.09	1176	48	<0.0001 Extremely Significant
	AT	0.54	1.05	0.15			
	DIFF	2.08	0.80	0.11			
<i>SavedanaCheshta</i>	BT	1.66	0.72	0.10	946	43	<0.0001

	AT	0.2	0.40	0.05			Extremely Significant
	DIFF	1.46	0.86	0.12			
<i>Kati Grah</i>	BT	1.72	1.03	0.15	990	44	<0.0001 Extremely Significant
	AT	0.12	0.33	0.05			
	DIFF	1.60	1.16	0.16			
<i>Chimchimayan</i>	BT	0.82	0.69	0.097	276	23	<0.0001 Extremely Significant
	AT	0.32	0.65	0.09			
	DIFF	0.50	0.58	0.08			
<i>PaadDurbalyata</i>	BT	0.28	0.45	0.06	36	09	<0.01 Very Significant
	AT	0.12	0.33	0.04			
	DIFF	0.16	0.37	0.05			
Radiographic findings	BT	1.26	0.92	0.13	0	0	No Change
	AT	1.26	0.92	0.13			
	DIFF	0	0	0			

Table 3: Showing Statistical Analysis

DISCUSSION:

The commonetiological factor of '*KatyashritVata*' or Lumbar Spondylosis & '*KatigatVata*' are degenerative changes due aging or trauma, changing in lifestyle & work pattern causing strain over lower back & travelling for prolongs duration and un salutary- unhealthy food habits causing nutritional deficit. The same can be co related with *hetuofVataprakop&Dhatukshaya*. Further, it causes Lower backache (*Kati shool*), Stiffness (*Kati grah*), Restricted Lumbar movement (*Savedana Katigati*), Radiating pain to the lower extremities (*Chimchimayan*) and Degeneration of Lumo-sacral spine (*Kati Asthi sandhi Dhatukshay*).

In present clinical study, subjective assessment of Dependent variables was done & appropriate statistical test by Wilcoxon-matched-pairs signed-ranks Test was applied to draw the efficacy of treatment. In observation , 79.23% patients got complete relief from *Kati shool*, 88.55 % patients got relief from '*Savedana Katigati*' and 93.02% patients relieved from *Kati grah*, with '*PanchtiktaGhritGuggulu*'- internally and *AshwagandhaOil Kati Basti* (Locally). Further, '*Chimchimayan*' present was relieved in 62.87% patients and patients having *PaadDaourbalyata* were relieved to 58%. Further, the Demographical data did not showed significance in drawing conclusion.

Probable Action of drug –

PanchtiktaGhritGuggulu -The therapeutic action of '*PanchtiktaGhritGuggulu*' is mainly related to characters of *Tikta Rasa* drugs, *Goghruta* and *Guggulu*. These *Tikta* drugs having adaptogenicity are included in combination to make it *Vataghna* and *Rasayan(Dhatuwardhan)*. Similarly, they strengthens *Jatharagni* as well as *Dhatwagnii*. e.

metabolic fire. It digests and metabolizes (*Pachan&Parinaman*) of abnormal *Kapha*, *Kleda*, thus destroying *Srotorodha*, ultimately, leading to promotion of movement of *VataDosh*a in body channels (*Vatanulomana* by *SrotoroshodhanabyAamapachanandDhatwagnideepan*).

The drugs also lead to formation of *Dhatu* of good quality (*DhatuPoshan*, *DhatuPrasadan* by *Prashasta*, *SanhatDhatuNirman*). One of the major ingredients is *Guggulu* which possesses *Vataghna*, *Kaphaghna*, *Shoolaghna*, *Shothaghna*, *Asthiposhak*, *Yogavahi*, *Rasayan*, *Vrishya* properties. *Guggulu* helps drugs in combination to reach to minute channels and deeper structures (*SookshmaSrotogamitva*). *Yogavahi* property of *Guggulu* is useful to increase potency of other drugs.

The ingredients such as *Maricha* and *Vachha* facilitates *Vatanulomana* and *Dhatuposhana*. Similarly, the *Ksharadvaya* added in the formulation, helps in promoting *Vatanulomana* & decrease *Shool* (Pain). *Goghrita* is *Vatapittashamak*, *Sookshmasrotogami*, *Yogavahi*, *Rasayan* and best of *Snehadravya*. *Goghrita* possess special feature of *Sanskaranuvartan* means it facilitates actions of drugs which are mixed with it and its characters can be altered by processing as per requirement. Addition of *Goghrita* as one of the main content of formulation makes it potent *Snehakalpa*. It also takes care of little *Roukshya* which can be there due to combination of all *TiktaRasabhuyishtha* drugs.

Thus, '*PanchtiktaGhritGuggulu*' proved one of the best *Vataghna*, *Shoolaghna*, *Rasayan* combination that acts in both types of *KatigataVata* viz. *Dhatukshayajanya* and *Margavarodhajanya*.^[9]

Ashwagandha – This herbal drug is prescribed for a variety of musculoskeletal conditions (e.g., Arthritis, Rheumatism), and as a general tonic to improve overall health^[10]. Roots of the plant reportedly exhibit anti-inflammatory, anti-tumour, anti-stress, antioxidant, immunomodulatory, haematopoietic and rejuvenating properties.^[11]

The drug *Ashwagandha* possesses many qualities, including *Kustha*, *Vataroga*, *Dipan*, *Pachan*, *Jwara*, Osteoporosis, Pregnancy to infertile women, Strength, anti-inflammatory, antitumor, and immunomodulatory properties, as well as exerting an influence on the endocrine, nervous, and cardiopulmonary systems. *Ashwagandha* is mentioned in *GudduchadiVarga*. It is *Kashaya* and *Tiktain Rasa*, *Ushna* in *Virya*. Its properties and actions are *Bala karaka*, *Sukravardhaka*, *Rasayana*, *Vata-KaphaShamaka* and alleviates *Shotha* etc.^[12]

Action of Panchkarma-Kati Basti

Snehan karma (local oleation procedure) loosens the vitiated *Doshas* which are adherent to the *srotasas* i.e. channels become soft & gets displaced from its places. *Swedan karma* (local fomentation), liquefies the vitiated *Doshas* & bring them to nearest *Koshta* (passage or cavity), from where it can be easily removed.

Similarly, vitiated *Doshas* and unwanted metabolites causing pressure on end nerves inducing pain can be easily eliminated by '*KatiBasti*' procedure. It helps in pacifying the supply of nutrients to the adjacent muscle fibers and Lumbo-sacral vertebrae, forms newer healthier tissues thus, help in arresting degenerative process and strengthens the muscles and boney tissue.

CONCLUSION

Lumbar Spondylosis and *KatyashritVata* has resembling clinical manifestations like progressive pain in the Lumbar region, painful lumbar movements, lumbar stiffness, tingling sensation & weakness in lower extremities.

'*PanchtiktaGhritGuggulu*' is combination of total 31 ingredients. Out of which, *Panchtikta* named *Nimba*, *Amruta*, *Patol*, *Kantakari* and *Vasa* are in large quantity along with *Goghruta* and *Guggulu*. Rest of 24 drugs are in lesser quantity, still have remarkable role in action of '*PanchtiktaGhritGuggulu*'. Action of drug is mainly related to characters of *Tikta Rasa* drugs, *Goghruta* and *Guggulu*.

Ashwagandha has multiple bioactive components which contribute to its biological activity as an analgesic, anti-inflammatory, anti-arthritis and chondroprotective.

In present clinical study, most of the symptoms of '*KatyashritVata*' were significantly relieved with '*PanchtiktaGhritGuggulu*'- internally and *Ashwagandha* Oil *Kati Basti* (Locally). The therapeutic efficacy of this specific treatment regimen can be interpreted by combined Action of the drug- '*PanchtiktaGhritGuggulu*' and *Kati Basti* Therapy.

Moreover, to establish this treatment modality further study is desired with large sample size and controlled study can be carried out to prove better therapeutic efficacy of the drug combination.

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