



Ayurvedic management of *Dhatukshayajanya Kativata* w. s. r. to lumbar spondylosis- a case study.

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ABSTRACT :-

In today's era everybody is busy and living stressful life. Low back pain affects approximately 60-85% of adults during some point of life from which in geriatrics it is mostly due to degenerative changes in spine. Overlooking of back pain and using temporary medicine without proper diagnosis leads to painful complication. *Kativata* which is correlated with LS is degenerative condition affecting disc, vertebral bodies or associated joints of lumbar spine. In this case study due to working lifestyle & ageing, degenerative changes in the form of multilevel peridiscal osteophytes, dehydration & desiccation of disc with pain and stiffness in lower back were observed. Assessment of *Sahachar tail katibasti*, *yogbasti* of *sahachar tail & dashmoolkwathadone*. After *Yogbasti Ksheer basti* given for next 15 days. Improvement in cardinal symptoms of *kativata* were observed. It also provided significant results in improving Oswerty Disability Index (ODI) Scale & pain

intensity. The possible understanding of the case in terms of Ayurveda and a therapeutic protocol with promising result has been discussed.

Keywords :- *Kativata* (Lumbar Spondylosis), *Yogbasti*, *Katibasti*, *Ksheerbasti*, degenerative, desiccation of disc, multilevel peridiscal osteophytes.

INTRODUCTION :-

In today's era everybody is busy and living stressful life. Low back pain affects approximately 60-85% of adults during some point of life¹. In which in geriatrics it is mainly due to degenerative changes in spine. Lumbar spondylosis is defined as degenerative conditions affecting the discs, vertebral bodies, and / or associated joints of lumbar spine.²The soft, elastic material dries out and loses height. Thickening of the ligaments that surrounds the disc occurs.

Alteration of the alignments of the joints that connect the back of the spine also occurs. These other ligaments undergo further degenerative changes, thickening and partial calcification³. The description about *Kativata* is not available as a separate disease entity in any *Ayurvedic* texts. It is mentioned as one of the *Vatavyadhi* in *Charaka samhita*⁴. In *Kativata* pain is predominantly present and as correctly said by Sushruta acharya without vitiation of *Vata*, *Shula* cannot be produced. The definition of *Jirna (Vridha)* itself says “*Ataha param HiymaanDhatvaindriyabalJirnamuchyate Aavarshatam*”⁵. This means that, in old age the *Dhatu* becomes *Kshina* along with *Indriya*, *bala* and *Virya* etc. According to principle of *Ashryaashrayee bhava* when increase in *Vata dosha* there will be decrease in *Asthi dhatu* as *Vata* & *Asthi* are inversely proportional to each other⁶. Hence it is clear that etiological factor of *Vatavridhi* is etiological factor of *Asthi kshaya*. Apart from these, *Medovaha*, *Asthivaha*, *Majjavaha*, *Pirushavahastrotas* can also be taken as the causative factor for *Asthi kshaya*. So ageing is one of the cause in degeneration of *Dhatu*s. In modern medicine lumbar spondylosis is managed by NSAID'S, corticosteroids but these drugs have so many side effects⁷. And on other hand *Ayurveda* describes its treatment in the form of *Panchakarma*, *rasayana*, *shamana*. In *Ayurvedic* practice lumbar spondylosis or *Kativata* cases are common but in this case patient came with MRI report having mild degenerative changes in the form of multilevel peridiscal osteophytes & disc desiccation changes & mild dehydration of

intervertebral disc are noted. For *Asthipradoshajavyadhi Charaka acharya* describes line of treatment in the form of *Basti*. So in this case study *Kati basti*, *yogbasti*, *ksheerbasti* was done as a part of treatment.

AIM & OBJECTIVES :-

AIM :-

To evaluate the ayurvedic management in *Dhatukshayajanyakativata* with special reference to lumbar spondylosis.

Objectives :-

- (1) To study the *Kativata* & lumbar spondylosis in detail.
- (2) To evaluate the ayurvedic management *Dhatukshayajanyakativata* with special reference to lumbar spondylosis with *Kati basti*, *yogbasti*, *ksheerbasti* & internal medicine.

CASE REPORT:-

A 60 yrs male patient came to OPD of *Ayurvedic* hospital. Patient presenting with *Katishoola* (Pain in lumbar region), occasional stiffness in *Katipradesh* (Lumbar region), *Sakshthachankaraman* (pain during walking), *Sakasthautkatasana* (pain in seating position). Was unable to lift heavy weight. Patient was suffering from same complaint since one and half year. But from 15 days increase in severity of symptoms are observed.

HISTORY OF PRESENT ILLNESS

Patient was having above complaints since one and half year. For these complaint he had attended orthopaedic surgeon for treatment but he didn't get relief from these symptoms .So patient came to OPD of Ayurvedic hospital for treatment.

PAST HISTORY

No H/O of DM / HTN / IHD / Jaundice / Thyphoid / or any other major illness or surgical treatment. No history of accident or fall.

PERSONAL HISTORY

Aharhetu :- Irregular meal timing's . More than 7 to 8 hrs gap between two meal. In meal *Tikshna, ruksha, amla, tikta rasa pradhanaaaharsevan.*

Viharhetu :- Patient is doing business of daily need items since 40 years . He works about 8 to 10 hours daily. In which most of the time he used to stand for hours.

Kalajhetu :- In *Varsha rutu* he was suffering in more intensity in said complaints & age of patient is 60 years.

GENERAL EXAMINATION

(Including **Asthavidhapariksha, Indriyapariksh&Strotasexamination**)

- 1) General condition of patient is moderate & afebrile.
- 2) Pulse rate: - 80 / min
- 3) B.P.:- 130 / 80 mm of Hg.
- 4) R.R :- 16/min
- 5) Weight :- 65 kg.
- 6) Height: - 164 cm

7) Systemic examination :- a) C.V.S.:- S₁S₂normal no abnormal sound. b) C.N.S.:- well conscious & oriented c) R.S.: - A.E. = B.E. clear. 8) P/A:- Soft, non-tender. liver, kidney, spleen not palpable. 9) *Prakruti:- Vatapradhan pitta anubhandhi* 10) *Kostha :-Mrudu* 11)*Agni :- Visham* 12)*Satva :- Madhyam* 13) *Sara :- Avara*

Asthavidhaparikshan

1)*Nadi:-Vatapradhan pitta* 2) *Mala:- Occasional constipation* 3) *Mutra :- 3 to 4 times per day. No micturation in night.* 4) *Jivha:- Saam* 5) *Shabda :- Spastha* 6) *Sparsha :- Shita* 7) *Druk :-Panduta* 8) *Akriti :- Madhyam.*

Indriyaparikshan

1) *Dnyanendriya(Sednsory organ) :- No any deformity.*
2)*Karmendriya :- Pada – Chankramankashthata*

Strotas Examination

Rasavahastrotas :- Ubhayapindikodveshtana(Occasional cramps in both legs). Panduta (Pallor)

AsthivahaStrotas:Katishool (pain in lumbar region), Occasional pain in both knee joint .

MajjavahaStrotas: Occasional Tingling and numbness in both upper and lower limb, difficulty in walking.

Clinical Examination of spine

Inspection :- No lordosis, no kyphosis was found in patient . No any other tenderness or major abnormality was seen in spinal examination of patient. No any swelling & surgical marks were seen in spinal examination.

Gait :- Normal

Investigation (on the day of admission of patient)

- Hb % :- 12.9gm %
- RBC :- 4.26 million / Cumm
- TLC :- 6000 /Cumm
- DLC :- N – 50 % L-40% M- 07 % E- 03% B-00
- Platelet count :-2, 28, 000 /Cumm.
- E.S.R.(Wintrobe's method) :-10 mm at the end of one hour.
- R.B.S. :- 130 mg%

Urine examination

Albumin-NIL Sugar-NIL
Microscopic examination-NAD

MRI of lumbar spine (Dated on06/04/2016)

MRI reported that normal curvature & alignments of lumbar spine has been maintained .Lumbar vertebral bodies are normal in heights. Mild degenerative changes in the form of multilevel *peridiscal* osteophytes & disc desiccation changes. Mild dehydration of *intervertebral* discs noted. Mild disc bulge at L4-5 & L5-S1 levels.

Diagnosis & Assessment:-

Lumbar spondylosis was diagnosed by the presence of pain, occasional stiffness restricted movements and by MRI findings like degenerative changes in the form of multilevel periodical osteophytes & disc desiccation. Dehydration of intervertebral disc. Mild disc bulge at L4-5 & L5-S1.A criterion of assessment was based on scoring on Oswestry low back pain disability questionnaire (ODI Scale). ODI Scale is extremely important tool to measure patient's functional disability and it is considered as 'gold standard' of low back functional outcome tool. This is composed of 10 sections (Questions). Each question is rated on 6 points (0-5) scale measuring activities like personal care, sleep, social life⁸.The two assessments were carried out before treatment and at the time of discharge on this scale. The patient was initially diagnosed as *DhatukshayajanyaKatigatvata* having symptoms according to *Ayurveda*.

TREATMENT

Treatment primarily conservative in nature & Focused on relive the pain at low back region. Treatment initially started with *Trayodashang guggul* 500 mg two times a day after meal for pain management for 15 days . And *Sarwangabhyang* by *Mahanarayn tail* and *SarvangaSwedana* by *Baspasweda*. Then *KatibastiofShahachartail* done on lumbar region for 15 days. *Yogbasti* :- Total 8 *basti* given in 8 days. First day *Anuvasanabasti* 80 ml of *Sahacharadi tail* was given after that *Niruhabasti* of *dashamoolkwatha* 700 ml given in alternate days followed by *Anuvasanbasti* . On 8th day again *Anuvasanbasti* was given. The

Anuvasanabasti was administered after meal and Niruha Basti was administered empty stomach. *Tiktakshirbastiof Ashwaganda, Shatawari, Guduchi Siddha Kshir* 500 ml was administered after meal for 15 days.

RESULT

The patient is symptomatically improved. The subjective parameter show improvement in clinical symptoms. By this treatment, patient shows significant results in straight leg raising test (Table no.1), Oswestry Low Back Pain Index (Table no.2), forward and backward bending (Table no. 3). Before Starting the treatment ODI scale was 53.33% (Severe disability range 41%-60%) and at the end of treatment it was 23.33% (Moderate disability range 21%-40%). Relief in symptoms like pain in lumbar region, *Sakashtautkatasan*, painful condition during walking was relieved.

DISCUSSION

Lumbar sponylosis is principally a disease of mid and later life. As the lumbar discs and associated ligaments undergo aging, the disc spaces frequently narrow. Thickening of the ligaments that surround the disc and those that surround the facet joints develops. These ligamentous thickening may eventually become calcified. Compromise of the spinal canal or of the openings through which the spinal nerves leave the spinal canal can occur⁹. In *Kativata* there were involvement of *Vata, asthi & sandhi dushti* were take place. Hence this disease was considered as *Madhyammarga roga*¹⁰. Due to ageing & working lifestyle there was *Dhatukshayajanyaavasta* can be seen and *Sthanshanshrya ofkativata* take place in *Kati*

Pradesh (Low back region). So used of *Katibasti* for local pain management & *Snehana* was used. *Katibasti of shachar tail* for the period of 45 minutes was done. *Katibasti* increases the blood flow over the low back area and helps to wash out the local toxins, waste materials & pain producing bio-chemicals from the affected area. As *Sahachar tail* was described by *Vagbhata in Kashthasadyavataroga* so for *kativasti* it was used¹¹. By this process it restores the local damage of ligaments, muscle, bone & intervertebral discs etc of that are chornic low back pain. *Trayodshang guggul* is mentioned by *Gadanigraha*. In *Falashurti* it is said that it can be used in *asthibhagna or asthividhaavastha*. *Guggul* also helps to relieve pain. *Basti* increases the *Bala, agni, medha, varna* etc. It strengthens the body, prolongs life, removes *Dosha dushti* from all over body & thus pacifies all the aliments. It is praised as “*Sarvarthakari*”. *Asthanabasti* is *strotovishodhana & malaphara*, while *Anuvasana* performs the function of *Vatashamana*¹². Another advantage of *basti* is that it can be administered in any age group¹³. According to principle of *Ashryaashrayee bhava* when increase in *Vata dosha* there will be decrease in *Asthi dhatu* as *Vata & Asthi* are inversely proportional to each other⁶. *Acharya Charaka & Vagbhata* mention the use of *basti* prepared with the *Tiktadravya, ksheera & ghrita* as the treatment¹⁴ of *asthikshaya* along with the use of *Swayonidravayas* (Similar substances). *Abhyanga & Swedana* gives soothing effect on body. It increases vasodilation which leads to improve in blood circulation. Ingredients of *Basti* such as

Godugdha, ghrita, madhu mitigate the *Vata & shamana of Vata* leads to decrease in pain. Genral debility is due to *Dhatukshaya & balakshaya*. Sodrvyas like *Ashwagnadha, Shatavari, guduchi* which are having properties like *Jivaniya, Rasayana, Balya, Dhatu poshaka* properties should be used. So *Ksheera (milk)* is *siddha* by these three drugs as per guidelines mentioned by *acharya sharangdhara* and then it is used in *Tiktak sheer basti*. Regarding *Tikta Ksheerbasti, Arundatta* says that the combination of *Snigdha & Shoshana* property produces *Kharaproperty* which is also the *Guna* of the *Asthi*. This nourishes the *Asthi* as per *Samnya siddhanta*.¹⁶. As to explain action of *Tiktaksheerabasti* according to *Panchabhoutika* theory predominance wise the *panchabhoutika* composition of *Asthi* is *Prithvi, Vayu, Agni, Akash & Jala mahabhuta*. The *Basti* contain *Khseera, ghritamadhu, tiktadravya* as main ingredients. The prepared *basti* is *Madhur, Tikta rasa pradhan*. If we analyze the *Panchabhoutikacompostion of Madhura, tikta rasa* it is *Prithvi+jala, Vayu+Akasha* respectively. Hence the composition of *Basti drvaya* is similar to *Asthi dhatu* & hence it nourishes the *Asthi dhatu* and due to *rasayana, balya* effect of *ashwagnadha, shatavari, guduchishamana of vata dosha* is take place and it delays the degenration of *Dhatu*. *Tiktadravyas* properties of *Deepana, pachana, satnyashodhana, lekhanam, kled-meda-vasa upshoshanam*¹⁷. Which can help to reduce *Medodusthi* & Helps in *aggrevation of agni of meda dhatu* which is indirectly helping to proper formation of *Meda dhatu* & Production of *Utarottar dhatu* i.e. *Asthi, Majja* etc. In

research studies found by Gyanendra D. Shukla et al 2010 in their review article when *Basti* nourishes the bacterial flora which helps in production of vit- B and to K & inhibits the production of pyurvicacid. This helps in prevent degeneration of myelin sheath spinal cord. Another drugs like honey, *saindhava*, milk are reach source of minerals which are absorbed through large intestine and transferred to other system and helps to cure the disease of other systems¹⁸. Patient can be managed by these *Panchakarma* procedure along with internal medicine.

CONCLUSION

Dhatukshayaavastha is a progressive systemic condition characterised by decrease in *Sharirbala, virya, paurashya, daurbalya* in functioning of sensory organs & many more symptoms. *Dhatukshayaavastha* even increased in speed if etiological factor like stress, heavy working lifestyle, unsatisfactory diet. Ageing can't be stop but it can be slow down by Ayurvedic management in the form of *Rasayana* therapy. But before administrating *Rasayanashodhana* is necessary and *basti* can be given in any age and it plays both role i.e. *Shodhana & rasayana* so it can be used very significantly. The *Chikitsa* mentioned for *Asthipradoshajvyadhi* stress upon the use of *basti* and *swayonidravayas*. So in this study combination of *Katibasti, Yogbasti, Ksheerbasti* is used. There was significant relief in subjective symptoms & marked improvement changed in ODI scale. Thus it can be concluded that use of this combination of *basti* plays role in *Dhatukshayajanya Kativata*. Further

randomized controlled trials with large sample are required to substantiate the present findings.

Table no.1 (Straight leg raising test)

Before treatment		After treatment	
Right leg	Left leg	Right leg	Left leg
60 ⁰	50 ⁰	80 ⁰	80 ⁰

Table no. 2 (Owestry Low Back Pain Index)

Sr No	Before treatment(53.33 %)	After treatment(23.33 %)
1.	The pain in moderate at the moment(2)	No pain at the moment(0)
2.	Suffering with pain while dressing and he was careful(2)	Patient can floor after himself without causing extra pain.(0)
3.	Can lift very light weights(4)	Patient prevents him from lifting heavy weights off the floor, but can manage if they are conveniently placed on table.(2)
4.	Pain prevents him from walking more than ½ mile.(2)	Pain prevents him walking more than i mile.(1)
5.	Pain prevents him from sitting more than 30 minutes.(3)	Pain prevents him sitting more than one hour(2)
6.	Pain prevents him standing more than 30 minutes.(3)	Pain prevents him from standing for more than one hour.(2)

Table no. 3 (Relief in Bending)

Before treatment	After treatment
Forward bending- Painful	Forward bending- Painless
Backward bending - Painful	Backward bending- Painless

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