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# AYURVEDIC MANAGEMENT OF KATIGRAHA W.S.R. LUMBAR SPONDYLOLISTHESIS: A CASE STUDY

# Dr. Neha<sup>1</sup> and Dr. Prashant Baghel\*<sup>2</sup>

Assistant Professor, Shalya Tantra Department, Doon Institute of Medical Sciences, Dehradun, Uttarakhand.

\*Corresponding Author: Dr. Prashant Baghel

Assistant Professor, Kriya Sharira Department, Doon Institute of Medical Sciences, Dehradun, Uttarakhand.

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#### **ABSTRACT**

Lumbar spondylolisthesis is a deformity of lumbosacral region by gradual forward slipping of lumbar spine on the sacrum. Low back pain affects 70-80% of adults and L5 is responsible for about 10% of all the back pain conditions. Most patients with back pain do not benefit from surgery and these surgical procedures provide short term outcomes. The present article deals with a case diagnosed as Grade II Lumbar spondylolisthesis of L5 over S1 and he was advised for the surgery. The case was considered as *Katigraha* in Ayurvedic diagnosis. He was treated with *Anushalya karma- Agni karma* and Cupping therapy along with two oral medications- *Trayodashang guggulu* and *Maharasnaadi Kwatha*. Various assessments were done before and after the treatment. The patient got significant improvement in his condition. Cupping therapy and *Agni karma* played a pivotal role in the management of *Katigraha*.

**KEYWORDS:** Lumbar spondylolisthesis, *Katigraha*, *Agni karma*, Cupping therapy.

# INTRODUCTION

Lumbar spondylolisthesis is a deformity of lumbosacral region by gradual forward slipping of lumbar spine on the sacrum.<sup>[1]</sup> Males are more affected than females by this condition. Low back pain affects 70-80% of adults and L5 is responsible for about 10% of all the back pain conditions. [2] Patient faces difficulties in normal day to day work. In lumbar spondylolisthesis, pain is felt at lumbar region, radiating to buttock and back of thigh. In modern medicine the line of treatment are steroids, NSAIDs, physiotherapy. But this treatment has many side-effects with its own limitations. According to Ayurveda, it is closely related with Katigraha. Acharya Charaka has illustrated Katigraha in 80 Nanatmaja Vikara of Vata Dosha. One previous study correlated lumber spondylolisthesis with Kativata. [3] Katigraha is illustrated separately in Ayurvedic classical text "Gada Nigraha". Katigraha is a Vata vyadhi showing features like Shosha (degeneration), Stambha(stiffness), and Shula(pain). The pain is produced due to Sama Vata (with Ama dosha) or Niraama Vata(without Ama dosha). Its movement in Kati pradesha produces Shoola and Stambha. According to Ayurvedic literature, vertebral column is made upof Asthi dhatu. This Asthi dhatu has Ashrya-Ashrayi Sambhandha with Vata dosha. So, line of treatment is to alleviate vitiated Vata dosha with various procedures like Agni karma, Raktamokshana and Vata shamaka oral medicine.

# **CASE STUDY**

A male patient of 34 years age came to *Shalya tantra* OPD with OPD no. 15753 in Doon institute of medical sciences (DIMS), Dehradun, Uttarakhand. He had complaints of lumbar pain radiating to back of right leg, tingling sensation over right leg, numbness right foot, and difficulty in walking for 1 year. The nature of pain was aching, increasing with movements and decreasing with rest. He was also unable to bend and stand for a long time. He had taken allopathic treatment from various hospitals during this period. But there was no relief from the treatment. So, he was advised for the surgery. Finally he came to this hospital for *Ayurvedic* management.

**Past history**- The patient had history of minor road traffic accident 1 year before and he fell down in supine position having injury over his back. Since then, he is suffering from the above complaints.

No past history of any other medical illness found. No family member had similar problem.

# **General examination**

Vitals BP- 130/80 mm Hg Pulse- 76/min Temperature-98.4 F

# **Systemic Examination**

Respiratory system

<sup>&</sup>lt;sup>2</sup>Assistant Professor, Kriya Sharira Department, Doon Institute of Medical Sciences, Dehradun, Uttarakhand.

Chest clear, Air entry bilaterally equal.

CVS- $S_1$ - $S_2$  normal, no any abnormal sound heard.

CNS- fully conscious, well oriented.

#### Local examination

- 1. Pain- as per visual analogue scale VAS 8
- Numbness- Right leg present Left leg- absent
- 3.

	Tests	Right leg	Left leg
1.	Straight leg raising test (SLRT)	30 degrees, painful	70 Degrees, painless
2.	Lasique test	Positive	Negative
3.	Pump handle (PH)	Positive	Negative
4.	SIST	Negative	Negative

### 4. Reflexes

S. no.	Joint	Right leg	Left leg
1.	Knee	+	++
2.	Ankle	+	+
3.	Plantar	Plantar flexion of toe	Plantar flexion of toe

# **Investigations**

- HB-12.4 gm %
- Urine examination- routine and microscopic- normal
- BSL random 104mg/dl
- ESR-8 mm/Ist hour
- X-ray LS spine- ullman's sign present, osteophytes
- MRI of Lumbo-sacral spine- shows changes grade -II spondylolisthesis of L5 over S1.

Marginal osteophytes involving lumbar spine noted.

# **Diagnosis**

Lumbar spondylolisthesis was diagnosed on the basis of above findings. Oswestry Disability index and Rolandmorris questionnaire was also used. Oswestry Disability Index is considered as 'Gold standard' of low back functional disability. This is composed of 10 questions. Each question is rated on 6 point scale measuring activities like personal care, sleep, social life etc.<sup>[4]</sup> The Roland-Morris low back pain and disability quessionarre contains 24 statements and patient should mark the sentences which describes to him on that particular day of measurement. [5] These two assessments were made before and after treatment. The patient was diagnosed as Saama Katigraha according to Ayurveda.

#### **Treatment**

The patient was treated primarily with Shamana aushadhi (conservative treatment). The treatment initially started with Trayodashanga Guggulu 500 mg

and Maharasnadi Kwatha 30 ml twice a day for 1 month. Then Anushalya karma Agnikarma was carried on the patient every Wednesday for 4 weeks. Consequently, cupping therapy was also done on the patient every Saturday for 4 weeks.

Drugs

Sr. No.	Drug	Dose	Duration
1	Maharasnadi kwatha	30 ml twice a day	30 days
2	Trayodashanga guggulu	500 mg twice a day	30 days

# **Procedures**

Sr.no.	Procedures done	Duration	Interval
1.	Cupping therapy	4 settings	7 days interval
2.	Agnikarma	4 settings	7 days interval

#### Follow up and out come

During the treatment of 30 days, the patient got relief from the symptoms. And overall relief from symptoms occurred.

S. No.	Complaints		Before treatment	After treatment
1.	Pain as per visual analogue scale (VAS)		9	2
2.	SLRT	Right leg	40 degrees	70 degrees
۷.		Left leg	90 degrees	90 degrees
3.	Lasique	Right leg	Present	Absent
٥.		Left leg	Absent	Absent
4.	Pump handle (PH)	Right leg	Present	Absent
4.		Left leg	Absent	Absent
5.	SIST	Right leg	Absent	Absent
3.		Left leg	Absent	Absent
6.	Numbness	Right leg	Severe	Reduced
0.		Left leg	Absent	Absent
	Reflexes	Right leg	+	++
7.	Knee	Left leg	++	++
7.		Right leg	+	+
	Ankle	Left leg	+	+
8.	Oswerty disability index		40	11
9.	Roland- Morris low back pain and disability questionnaire		21	4

#### DISCUSSION

Lumbar spondylolisthesis is a major health risk. But it is important to note that in Ayurvedic prospective it is Vata roga. Vitiation of Vata occurs by two ways- Dhatu*janya*(degenerative) Aavaranakshaya and janya(Stagnation). Where there is stagnation, there will be pain. If stagnation is removed, pain will itself be reduced. So, cupping therapy and Agni karma were selected. According to Acharya Susruta, the most vitiated *Dosha* comes out first during *Raktamokshana*. [6] The suction applied by cupping sucks out and breaks the congestion, Aavarana (stagnation). In present case, the vitiated Vata Dosha along with Rakta Dhatu was let out by pricking. Thus, it restores the free blood flow to the local area. Basically, it not only removes Aavarana but also alleviate Vata and Kapha dosha. Agni possesses Tikshna, Ushana, Ashukari and Sukshma Gunas, which are opposite to Vata Dosha. Physical heat from hot Rajat Shalaka is transferred as therapeutic heat to Twakdhatu which acts in three ways. [7] First, it removes *Sroto*-Avarodha due to its Ushna-tikshna Gunas. Secondly it increases Ras-Rakta Samvahan (blood circulation) to the affected site which flushes away the pain producing substances. Third, the therapeutic heat increases the Dhatvagni which digest the Ama Dosha from the affected site. Maharasnadi kwatha is a polyherbal formulation prepared from 26 different plants having properties Sholahara(analgesic) of Shothanashana(anti-inflammatory). [8] Trayodashang guggulu is the combination of 13 herbs including Guggulu possessed in ghee. The contents of Trayoshanga guggulu are mainly Guru, Snighda Gunatamaka, Madhura vipaki and Ushna viryatmaka in properties which corrects vitiated Vata dosha and directly take part in Samprapti vighatana of Kati-graha.<sup>[9]</sup>

#### CONCLUSION

This case study specially emphasises cupping therapy and Agni karma along with *Shamana* medicine in the management of *Kati-graha* (lumbar spondylolisthesis) along with its associated symptoms. This single case study has been done within a short span of time. So, further study including large sample size and longer duration will be required to establish the role of *Agnikarma* and cupping therapy in lumbar spondylolisthesis.

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Figure 1: Agnikarma with Rajat Shalaka.



Figure 2: Cupping Therapy.

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