

# International Journal Homoeopathic Sciences

E-ISSN: 2616-4493 P-ISSN: 2616-4485 www.homoeopathicjournal.com IJHS 2020; 4(2): 92-97

Received: 07-02-2020 Accepted: 09-03-2020

#### **Gurudev Choubey**

Research Officer (H), Central Council for Research in Homoeopathy, Ministry of AYUSH, Govt. of India

#### Dhiraj Debnath

Senior Research, Central Council for Research in Homoeopathy, Ministry of AYUSH, Govt. of India

#### Varanasi Roja

Research Officer (H), Central Council for Research in Homoeopathy, Ministry of AYUSH, Govt. of India

#### Jaya Gupta

Research Officer (H), Central Council for Research in Homoeopathy, Ministry of AYUSH, Govt. of India

# Abhiram Banerjee

Research Associate (H), Central Council for Research in Homoeopathy, Ministry of AYUSH, Govt. of India

# **Gurudev Choubey** Research Officer(H), Central Council for Research in

**Corresponding Author:** 

Homoeopathy, Ministry of AYUSH, Govt. of India

# Managing pain and stiffness through individualized homoeopathy in lumbar spondylosis: Results of a prospective consecutive case series

# Gurudev Choubev, Dhiraj Debnath, Varanasi Roja, Java Gupta and Abhiram Banerjee

**DOI:** https://doi.org/10.33545/26164485.2020.v4.i2b.153

#### Abstract

**Background:** Low back pain affects approximately 60 – 85% of adults during some point in their lives and LS is responsible for about 10 % of all the back-pain. Common conventional treatments like NSAIDS and Epidural steroid injections (ESI) deleterious side effects.

Objectives: This case series of lumbar spondylosis presented here tries to show response to individualized homoeopathic medicine in context of pain, stiffness through Visual Analog Scale (VAS) and RODO.

Method: Patients with spondylotic changes in lumbar spine were included in this case series. Individualized homoeopathic medicines were prescribed in singledose in each case and followed up every 2 weeks for eight months. Pain and stiffness in every case was assessed using Visual Analog Scale (VAS) at baseline and every two weeks for eight months. Revised Oswestry disability questionnaire (RODQ) scoresto assess quality of life was used at baseline and at the end of 8 months.

**Results:** Mean VAS score for pain reduced from  $78.07 \pm 13.72$ mm (baseline)to  $38 \pm 25.55$  mm (end); 95% CI: 22.05 - 58.09; P < 0.05. Stiffness reduced from 65.10 ± 16.35 (baseline) to 16.50 ± 10.01 mm (end); 95% CI: 34.88 - 62.32; P<0.05. Mean RODQ score reduced from 31.64± 3.20 (baseline) to 13.57± 7.06 (end); 95% CI: 13.21 – 22.93; P<0.05.

Conclusion: The results has trend showing positive role of homoeopathic medicines in management symptoms related to lumbar spondylosis. Controlled clinical studies are warranted.

Keywords: Case series, lumbar spondylosis, homoeopathy, RODQ

#### Introduction

Lumbar Spondylosis (LS) is defined as degenerative condition affecting the discs, vertebral bodies and associated joints of the lumbar spine. Low back pain affects approximately 60 – 85 % of adults during some point in their lives and LS is responsible for about 10 % of all the backpain conditions [1, 2]. Conventional medical treatment like NSAIDS and Epidural steroid injections (ESI) have become a common interventional strategy in the management of lumbar spondylosis and these medications are having deleterious effects like large intestinal ulcers, bleeding, perforation, non-specific colitis and meningitis, arachnoiditis respectively.<sup>3-</sup> <sup>4</sup>CAM (Complementary/ Alternative medicine) therapy is being popular in patients with musculoskeletal disorders including low back pain <sup>[5, 6]</sup> A high prevalence of CAM use in rheumatic patients is observed in the United States(18- 94%), Canada (60-91%), Mexico(56–83%), Australia (40–82%), Germany (78%) and India (43–72%) [7].

There are very few papers published for effectiveness of homoeopathy in low back pain (LBP) [8, 9] but there is paucity of studies specifically regarding the homoeopathic treatment of LS [10]. In one study it has been shown that homoeopathy is efficacious in significant decrease of Oswestry score of LBP in compared to standardized physiotherapy and in another study, it was seen that classical homeopathic treatment represented an effective treatment for low back pain and it improved health-related QoL and reduces the use of other healthcare services. This paper presents a series of 17consecutive cases clinically and radio logically diagnosed as lumbar spondylosis and their response to individualized homoeopathic medicine in context of pain, stiffness functional disability through Visual Analog Scale (VAS) [11] and Revised Oswestry disability questionnaire (RODO) [12-15] for quality of life.

# Methodology Study design

Consecutive cases from Rheumatology Out Patient Department (OPD) at Clinical Research Unit (H), Siliguri were examined through detailed case taking including clinical examination of each and every patient in a prestructured proforma. In this prospective case series, patients aged more than 30 years attending the OPD with spondylotic changes on radiological evidence (X-ray) of lumbar spine were considered.

#### **Outcome measures**

VAS (Visual Analog Scale) [9] in a scale of 0 to 100 mm ('0'score indicate no symptom whereas 100 mm indicates the worst possible symptom) for pain, stiffness was assessed before treatment (baseline) and till 8 months. Revised Oswestry Low Back Pain Disability Questionnaire (RODQ) were assessed was for disability and quality of life which enables to understand how much your low back pain has affected your ability to manage your everyday activities, was assessed be for treatment and end of the treatment [12-14], In this questionnaire there are 10sections (0 to 5 points each) for pain intensity, Personal Care, Lifting, Walking, Sitting, Standing, Sleeping, Social life, Travel and Changing of Pain. Each of the 10 sections is scored separately (0 to 5 points each) and then added up (max total = 50). The percentage of disability was calculated as: Patient's Score / total possible scores x 100 = \_\_\_\_\_\_ % Disability

#### Intervention

A detailed case taking was done in every case and an individualised homoeopathic medicine was selected according to homoeopathic principles. The potency was used as per the need of the patients in every case and the doses were selected as per the case requirements. The repetition of medicine was done as per instruction stated in Organon of Medicine.

#### Statistical analysis

Paired "t" test was used to analyse the changes that occurred in the values of "VAS scoring system" and Revised Oswestry low back pain disability questionnaire scores as a result of the homoeopathic intervention. Statistical package for the social sciences (SPSS) software is used for statistical calculations.

#### Results

The descriptive data of all the 17 patients have been shown in the table no. 1. VAS scores of pains, stiffness of every month have been mentioned in table no 2 & 3 and the course of pain and stiffness (mean values) of LS over 8 months has been shown in a line diagram in fig. no.1.RODQ scores have been mentioned in table no.4 &5 and the interpretation of disability score has been shown in fig. 2. The results of statistical analysis have been displayed in table no. 6.

Table 1: Summary of presentations of patients with Lumbar spondylosis

Case No.	Age	Gender	Occupation	Initial presentations	VAS baseline	Associated Medical Conditions	Prescribed Homoeopathic Medicines	
1	53 years	Female	House wife	Pain in the lower back,< from standing, evening with H/O trauma before 5 -6 months, father- MI,	Pain- 49 mm Stiffness- 0	Dyspepsia Hypertension, Grade I Spondylolysthesis, Calcaneal spur	Nuxvom 200C (as an acute for farting problems) Arnica mont 1M (for remaining of symptoms including h/o trauma)	
2	45 years	Female	House keeper	Pain in back, knees and both shoulder joints, <at h="" morning,="" night,="" o<br="">suppressed skin eruption, Father-BHP</at>	Pain- 60 mm Stiffness- 0	Dyspepsia OA knee	Sulphur 200C Pulsatilla 30C(as an acute for farting problems)	
3	69 years	Female	House wife	Pain in lumbar spine, in both knees < walking, standing,> by motion H/O-hysterectomy,	Pain-70 mm Stiffness-0	Deafness, Dyspepsia, Wrist Ganglion	Rhus tox200C, 1M.  Calc fluor 200C(improvement was stopped and after recasetaking pain was still > by motion, warm application &< byrest and presence of wrist ganglion)	
4	63 years	Female	House wife	Pain in lower back and in both knees < bending forward, > by pressure, warmth, H/O- hysterectomy	Pain-70 mm Stiffness-0	DM, Hypertension, Hypothyroidism	Sulphur 6C, 30C, 200C	
5	37 years	Male	Data entry operator	H/O jaundice, father- Hypertension, DM	Pain-60 mm Stiffness-40 mm	Lumbar scoliosis, Bilateral sacroilitis	Sulphur 6C, 30C, 200C	
6	80 years	Male	Retired service man	Stitching pain in lower back and weakness of lower limb <pre>pressure, H/O- typhoid, malaria; father- asthma</pre>	Pain-80 mm Stiffness-0	Lumbar scoliosis	Pulsatilla 6C, 30C	
7	52 years	Female	House wife	Pain in lumbar spine < rest, rising from sitting, > by motion, cold; H/O- Cholecystectomy, Father- DM, hypertension	Pain-70 mm Stiffness-0	Insomnia	Pulsatilla 6C	
8	42 years	Female	House wife	and full moon, first motion, H/O- suppressed skin eruption, mother- asthma	Pain-80 mm Stiffness-70 mm	Bilateral sacroilitis	Lycopodium 6C	
9	57 years	Male	Driver	Pain in lower back and nape of neck < rest, morning,>by continued motion;	Pain-88 mm Stiffness-40	Diffuse idiopathic skeletal	Rhus tox 30C	

				F/H: mother- TB	mm	hyperostosis (DISH)	
10	50 years	Male	Painter	Pain in back and in both knees < rising from sitting,> by warmth, motion; H/O- trauma to back, mother- MI	Pain-83 mm Stiffness-70 mm	OA knee	Arnica 200C( for h/o trauma) Rhus tox 6C, 30C, 200C(improvement was stopped & depending on remaing symptoms)
11	39 years	Male	Businessman	Pain lower back and left ankle < cold weather, exertion, H/O- cataract surgery, father- DM	Pain-88 mm Stiffness-60 mm	Absent	Phosphorus 30C Rhus tox 30C(for acute exacerbation of pain)
12	65 years	Male	Retired service man	Pain in back < motion, cold ,>by rest, warmth H/O- CVA, mother- cancer	Pain-94 mm Stiffness-90 mm	Lumbar scoliosis	Bryonia 30C(as an acute remedy for pain) Calcarea carb 200C
13	59 years	Female	House wife		Pain-87 mm Stiffness-82 mm	OA knee Dyspepsia	Lycopodium 30C, 200C. Arnica 200, 1M(not improving further & after recasetaking h/o of injury was found)
14	47 years	Male	Farmer	8,	Pain-87 mm Stiffness-78 mm	Dyspepsia	Phosphorus 30C, 200C Rhus tox 30C(as an acute exacerbation of pain due to h/o lifting heavy weight)
15	43 years	Female	House wife	Pain in lower back, in both knees and left shoulder joint < rising from sitting, standing, > by motion; H/O-Cholecystectomy, parentshypertension, DM	Pain-87 mm Stiffness-67 mm	Tinea Corporis Dyspepsia OA knee	Bacillinum 200C Sulphur 30C, 200C(improvement was stopped and after recasetaking it was found pain in left shoulder and LBP < standing &> by lying on right side)
16	65 years	Female	House wife	Pain in lumbar region, cervical region and in both knees < at night, rest, > by motion; H/O- trauma to back		OA knee	Rhus tox 200 Arnica 1M(not improving further & then h/o of injury was included)
17	50 years	Male	Business man	I riging from siffing early morning	Pain-87 mm Stiffness-62 mm	Cervical spondylosis	Lycopodium 30C, 200C

Table 2: showing every month VAS scores (mm) of pain

Case no.	Base line	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4th	5 <sup>th</sup>	6th	7th	8th
1.	49	60	55	48	30	24	20	12	7
2.	60	65	70	70	70	74	80	85	89
3.	70	75	71	65	50	45	35	20	10
4.			-						
5.	60	60	60	65	65	60	50	50	50
6.			-						
7.	70	70	70	70	70	65	65	65	65
8.			-						
9.	88	85	80	74	69	69	62	62	62
10.	83	80	75	69	64	60	60	55	51
11.	88	70	52	30	25	46	28	15	8
12.	94	80	66	55	47	25	20	10	5
13.	87	82	75	60	55	44	40	34	30
14.	87	80	71	55	30	30	55	46	40
15.	87	75	69	60	56	40	36	29	25
16.	83	76	71	71	71	65	59	55	55
17.	87	80	72	66	59	47	42	35	35
Mean	78.07	74.14	68.35	61.28	54.35	49.57	46.57	40.92	38

Table 3: showing every month VAS scores (mm) of stiffness

Case no.	Base line	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4th	5th	6th	7th	8th
1.									
2.									
3.									
4.									
5.	40	40	35	31	31	28	24	20	20
6.									
7.									
8.									
9.	40	36	33	30	27	22	16	10	10
10.	70	64	60	55	55	51	46	40	30

11.	60	50	42	34	21	37	19	9	0
12.	90	81	73	65	50	32	25	16	10
13.	82	75	69	50	50	34	22	17	10
14.	78	72	60	45	33	55	38	32	25
15.	67	55	48	48	35	26	20	15	10
16.	62	50	44	44	40	36	30	24	20
17.	62	57	51	47	42	38	33	30	30
Mean	65.1	58	51.5	44.9	38.4	35.9	27.3	21.3	16.5

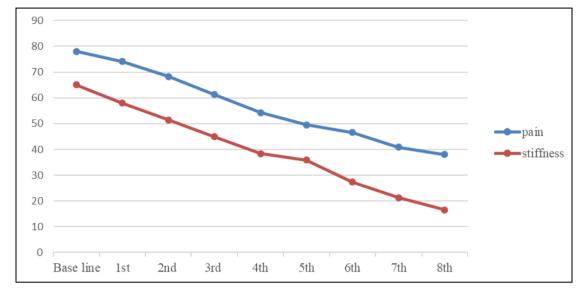


Fig 1: The course of pain and stiffness (mean values) of LS over 8 months

Table 4: Revised Oswestry low back pain disability questionnaire scores

Sl. No.	RODQ score before treatment	Mean RODQ score before treatment	RODQ score after treatment	Mean RODQ score after treatment	Percentage (%) of disability before treatment	Percentage (%) of disability after treatment
1	25		8		50	16
2	30		35		60	70
3	34		10		68	20
4	36		-		72	-
5	28		18		56	36
6	35		-		70	-
7	32		12		64	24
8	36	31.64	-		72	-
9	34	(excluding 3	14	13.57	68	28
10	32	dropped out patients	10		64	20
11	35	i.e. 4,6 &8)	8		70	16
12	38		8		76	16
13	30		15		60	30
14	30		14		60	28
15	32		10		64	20
16	33		18		66	36
17	30		10		60	20

Table 5: Interpretation of disability scores

Eunstianal disability	Number of patients					
Functional disability	Before treatment	After treatment				
Minimal disability	0	3				
Moderate disability	0	10				
Severe disability	2	0				
Crippled	15	1				

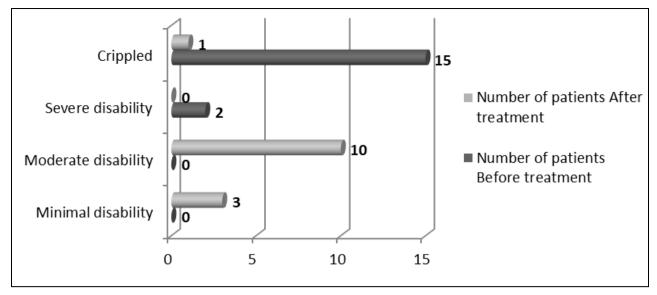


Fig 2: Interpretation of disability scores

Table 6: Statistical analysis of VAS score before and after treatment

Sl.		Statistical			Mean VAS	score ± SD	Mean difference	Statistical
No.	Description	test	't' value	df	At base line	After treatment	with 95% CI	significant at <i>p</i> ≤0.05
1	Comparison of VAS score of pain before and after treatment in 14 patients	Paired 't' test	4.804384	13	78.07 ± 13.72	38 ± 25.55	40.07 (22.05 -58.09)	Yes
2	Comparison of VAS score of stiffness before and after treatment in 10 patients	Paired 't' test	8.013409	9	65.10 ± 16.35	$16.5 \pm 10.01$	48.60 (34.88 – 62.32)	Yes
3	Comparison RODQ scores before and after treatment	Paired 't' test	8.033693	13	$31.64 \pm 3.20$	$13.57 \pm 7.06$	18.07 (13.21 – 22.93)	Yes

## Discussion

This case series of LS showed a significant improvement in the pain and stiffness of the back pain. Among the 17 cases 53% are female and 47% are male. Mean VAS score for pain reduced from  $78.07 \pm 13.72$ mm (baseline)to  $38 \pm 25.55$  mm (end);95% CI: 22.05 - 58.09; P < 0.05. Stiffness reduced from  $65.10 \pm 16.35$  ((baseline) to  $16.50 \pm 10.01$  mm (end); 95% CI: 34.88 - 62.32; P < 0.05. Mean RODQ score reduced from  $31.64 \pm 3.20$  (baseline) to  $13.57 \pm 7.06$  (end); 95% CI: 13.21 - 22.93; P < 0.05. Results of paired 't'testshave been shown in table no. 6.

The individualized homoeopathic medicines are effective in managing pain, stiffness and functional disability of patients with lumbar spondylotic changes. Therefore, the utilization of homoeopathic medicine in such cases may help the patients by avoiding use of pain killers regularly and thus saving them from adverse effects of the drugs. Documentation of improvement was done for all the fourteen cases having variations in respect of age, gender, duration of illness and diagnosis. Validated outcome measures were used for such documentation and the improvements were attributed to the homoeopathic medicines selected on the basis of individualization.

An acceptable external validity of the findings of this case series is expected as the study setting was similar to those obtained in routine clinical practice. Internal validity is expected to be low due to lack of a comparator group. Chances of information bias were negated by the prospective nature of the study and selection bias was minimized by the consecutive nature of recruitment of the cases.

The conclusions are limited however, because the study does not contain a control group for comparison of placebo effect. Absence of a comparator group prohibited any hypothesis from being tested and any direct causal inference cannot be made regarding the efficacy or effectiveness of the treatment method. However, this case series may be useful for the purpose of hypothesis generation which can be tested in future by a parallel group explanatory or pragmatic trial with optimum sample size.

### References

- Gupta K, Mamidi P. Ayurvedic management of lumbar spondylosis with spondylolisthesis: A case report. Journal of Pharmaceutical and Scientific Innovation [Internet]. 2014 Nov-Dec[cited 2019; 3(6):533-535. DOI: 10.7897/2277-4572.036211
- Damayanthie Fernando KP, Thakar AB, Shukla VD. Clinical efficacy of Eranda Muladi Yapana Basti in the management of Kati Graha (*Lumbar spondylosis*). An International Quarterly Journal of Research in Ayurveda [Internet]. 2013 Jan-Mar[cited 2019; 34(1):36-41. DOI: 10.4103/0974-8520.115444
- 3. Bjarnason I, Hayllar J, Macpherson AJ, Russell AS. Side effects of nonsteroidal anti-inflammatory drugs on the small and large intestine in humans. Gastroenterology [Internet]. 1993 Jun [cited 2019 Apr 26];104(6):1832-1847. https://doi.org/10.1016/0016-5085(93)90667-2
- 4. Abram SE, C O'Connor T. Complications associated with epidural steroid injections. Regional Anesthesia& Pain Medicine [Internet]. 1996 Mar [cited 2019;

- 21(2):149-62.
- http://dx.doi.org/10.1136/rapm-00115550-199621020-00012
- Wong WH, Litwic AE, Dennison EM. Complementary medicine use in rheumatology: A review. World J Rheumatol [Internet].2015 Nov[cited 2019; 5(3):142-147.
  - DOI: 10.5499/wjr.v5.i3.142
- 6. Foltz V, Pierre YS, Rozenberg S, Rossiggnol M, Bourgeois P, Joseph L *et al.* Use of complementary and alternative therapies by patients with self-reported chronic back pain: a nationwide survey in Canada. Joint Bone Spine[Internet].2005 Dec[cited 2019; 72(6): 571-577. https://doi.org/10.1016/j.jbspin.2005.03.018
- 7. Jadhav PM, Jadhav MP, Shelke P, Sharma Y, Nadkar M. Assessment of use of complementary alternative medicine and its impact on quality of life in the patients attending rheumatology clinic, in a tertiary care centre in India. Indian Journal of Medical Sciences[Internet]. 2011 Feb[cited 2019; 65(2):27-34. DOI: 10.4103/0019-5359.103961
- 8. Gmünder R, Kissling R. The effect of classical homeopathy compared to standard physiotherapy in the treatment of chronic low back pain. Z Orthop your Grenzgeb [internet]. 2002[cited 2019; 140(5):503-508. DOI: 10.1055 / s-2002-34004.
- 9. Witt CM, Lüdtke R, Baur R, Willich SN. Homeopathic treatment of patients with chronic low back pain: A prospective observational study with 2 years' follow-up.Clin J Pain [Internet]. 2009 May [cited 2019; 25(4):334-9.
  - doi: 10.1097/AJP.0b013e31819050bb.
- Raj PP, Bayula B. Homeopathic Treatment of Lumbar Spondylosis: An Observational Study. American Journal of Homeopathic Medicine 2015; 108(3):104-110
- 11. Haefeli M, Elfering A. Pain assessment. Eur Spine J[Internet]. 2006[cited 2019; 15:17-24. DOI 10.1007/s00586-005-1044-x
- https://www.ipmhealthcare.com/storage/app/media/Os westry.pdf
- Page SJ, Shawaryn MA, Cernich AN, Linacre JM. Scaling of the revised Oswestry low back pain questionnaire. Archives of Physical Medicine and Rehabilitation[Internet].Nov 2002[cited 2019; 83(11):1579-1584.
  - https://doi.org/10.1053/apmr.2002.34604
- 14. Aithala JP, Kumar S, Aithal S, Kotian SM. Development of a Modified Disability Questionnaire for Evaluating Disability Caused by Backache in India and Other Developing Countries. Asian Spine J 2018; 12(6):1106-1116. Doi: 10.31616/asj.2018.12.6.1106
- 15. Hart DL, Stratford PW, Werneke MW, Deutscher D, Wang YC. Lumbar Computerized Adaptive Test and Modified Oswestry Low Back Pain Disability Questionnaire: Relative Validity and Important Change. Journal of Orthopaedic & Sports Physical Therapy [Internet]. 2012[cited 2019; 42(6):541-551. DOI:10.2519/jospt.2012.3942