



## RESEARCH ARTICLE

# Clinical Observation of *Panchamrit Lauha Guggulu* and *Panchguna Taila* in the Management of *Greevastambha* (Cervical Spondylosis): Retrospective Analysis

<sup>1</sup>Om R Sharma, <sup>2</sup>Sumeet Goel, <sup>3</sup>Deepshikha Arya, <sup>4</sup>Vinod K Lavaniya

## ABSTRACT

**Introduction:** Cervical spondylosis is emerging as a widespread problem in society. According to Ayurveda, *Greevastambha* simulates cervical spondylosis, a *Vataj nanatmaj vikara* (pure *vata* disorder).

**Materials and methods:** An open-label retrospective observational cohort design with 48 diagnosed cases of cervical spondylosis who were treated in usual clinical setting at outpatient department (OPD), of our institution, between March 2013 and June 2013 with *Panchamritlauha gugglu* (2 tablets twice a day with lukewarm water and *Panchguna taila* (10 mL local application twice daily). The patients who have completed their treatment with follow-up on 14th, 28th and 42nd day during treatment with the properly documented assessment on a visual analog scale of clinical symptoms of cervical spondylosis were included in the study.

**Aim:** To observe safety and efficacy of study drug in the patients suffering from cervical spondylosis in the clinical setting.

**Results:** All patients showed improvement in clinical symptoms maximum improvement was seen in numbness and pain symptom. Statistically, overall improvement was significant  $p < 0.01$  after 42nd day of treatment.

**Conclusion:** Study has shown promising results though confounding factors were not controlled and it was an observational study on patients treated in usual clinical setting, it may prove as preliminary data for extensive clinical research and further consolidation of the results.

**Keywords:** Ayurveda, *Greevagraha*, *Vataj* disorder.

**How to cite this article:** Sharma OR, Goel S, Arya D, Lavaniya VK. Clinical Observation of *Panchamrit Lauha Guggulu* and *Panchguna Taila* in the Management of *Greevastambha* (Cervical Spondylosis): Retrospective Analysis. J Res Ayurvedic Sci 2018;2(3):176-179.

**Source of support:** Nil

**Conflict of interest:** None

## INTRODUCTION

With the change in lifestyle in the modern era, the number of people is inclined to desk work and computer usage. Thus, cervical spondylosis is emerging as a widespread problem in society. Maximum numbers of desk workers are affected by one or the other stage of the disease. Cervical spondylosis is a chronic degenerative condition of the cervical spine that affects the vertebral bodies and intervertebral discs of the neck as well as the contents of the spinal canal. It may also include the degenerative changes in the facets joints, longitudinal ligaments, and ligamentum flavum. Spondylosis progresses with age and often develops at multiple interspaces.<sup>1</sup> According to Ayurveda, *Greevastambha* simulates cervical spondylosis, a disorder of *Vata dosha* or *Vataja nanatmaja vikara*<sup>2</sup> with symptoms of *Kupita vata* (vitiated *vata dosha*) as *pani-prishtha-shirograha* (stiffness in back neck-head and hands), *Gatrasuptata* (numbness), *Greeva yahundanam* (Chakrapani while explaining the word *hundanam* has given it two meanings. The first one is *Shiro prabhrutinamantah pravesha* which means inward intrusion of the head and its allied parts, which is possible because of implication with cervical parts. This condition is suggestive of the structural deformity. The other meaning is *Greeva stambha*, which denotes the restriction of the movement of the neck)<sup>3</sup> *Bhedastoda-arti* (Pain), *Vitiated vata* gets situated in *Greevagata sandhi* (cervical intervertebral joints) and produces *Greevastambha* or cervical spondylosis. The two main factors for the vitiating of *Vata* are *Margavarodha* (obstruction of vitiating *dosha*) and *Dhatukshaya* (diminished *dhatu*).<sup>4</sup> *Vata hara* management aimed at correction of vitiating *dosha* in the cervical region may prove to be beneficial for the improvement of cervical spondylosis.

## AIM

To assess the safety and efficacy of *Panchamritlauha guggulu* and *Panchguna taila* in the patients suffering from cervical spondylosis in the clinical setting.

## MATERIALS AND METHODS

A retrospective observational cohort design was adopted. Forty-eight patients who attended OPD of Regional Ayurved Research Institute for Nutritional Disorders, Mandi, Himachal Pradesh, between March 2013 and

<sup>1</sup>Consultant Ayurveda (Former Assistant Director Incharge),  
<sup>2-4</sup>Research Officer

<sup>1,3</sup>Regional Ayurved Research Institute for Nutritional Disorders,  
Mandi, Himachal Pradesh, India

<sup>2,4</sup>Central Council for Research in Ayurvedic Sciences, New  
Delhi, India

**Corresponding Author:** Om R Sharma, Consultant Ayurveda (Former Assistant Director Incharge), Regional Ayurved Research Institute for Nutritional Disorders, Mandi, Himachal Pradesh, India, Phone:+91-1905-222752, e-mail: dr.omsharma.mandi@gmail.com

June 2013. Diagnosed cases of cervical spondylosis (MRI Neck, findings suggestive of degenerative changes and cervical spondylosis, intermittent neck and shoulder pain, restricted movement of neck) between ages 18 and 70 years of either sex who were treated with *Panchamritlauha guggulu* and *Panchguna taila* and the patients who have completed their treatment with follow-up on 14th, 28th and 42nd Day during treatment with proper documented assessment on visual analogue scale of clinical symptoms of cervical spondylosis were included in the study.

To give internal validity to the study, it was decided to exclude people with comorbidities, cervical myelopathy or any other conditions that require medications and those who were on prescription medication for this condition. Patients with neck pain and other degenerative signs due to other reasons like spondylolisthesis, cervical spinal stenosis, diseases of atlanto-occipital joint, meningitis, atlantoaxial joint, muscle strain or soft tissue etiology, pregnancy, tumors, internal bleeding (hematoma) infection, injury, congenital cervical rib and acquired spinal deformity (Pott's fracture, compression fracture, etc.) Additionally, people with serious medical conditions such as uncontrolled hypertension, uncontrolled diabetes, or any other acute condition that disturbed sleep were not included in the observational study.

### Posology

The drugs manufactured by Shree Dhootpapeshwar Ltd., Mumbai were administered to the patients.

- *Panchamritlauha Guggulu*:<sup>5</sup> Two tabs (360 mg each tablet) with lukewarm water twice daily for six weeks (42 days).
- *Panchguna Taila*:<sup>6</sup> Ten mL lukewarm, local application twice daily.

### Assessment Criteria

The assessment was done by evaluating the clinical symptoms recorded during and after treatment and scoring system was adopted for statistical analysis of the result. The symptoms were assessed according to the severity grades as- mild, moderate and severe. Mild indicates symptoms while performing an activity but with no hindrance in the work, moderate indicates symptoms that create hindrance in the work and severe indicates the inability to perform any work because of symptoms. The symptoms were assessed according to the severity grades as mild, moderate and severe. Mild indicates symptoms while performing an activity, but with no hindrance in work, moderate indicates symptoms that create hindrance in work and severe indicates the inability to perform any work due to symptoms as shown in Table 1.

The efficacy of the drug was assessed in terms of cured (100% relief from all sign and symptoms), markedly

improved (50 to 99% relief), moderately improved (25 to 49% relief) and unchanged (<25% or no relief).

### Data Analysis

The information gathered on the basis of the above observations was subjected to statistical analysis using graph pad prism software version 6.01. Student 't' test was applied for statistical improvement analysis in the visual analog scale of cervical spondylosis.

### RESULTS

The grading of the severity scale is such that high positive numbers are indicative of high severity and low positive numbers are indicative of lower severity. Comparing baseline to 42nd day (end of treatment), all 48 participants experienced improvement (Tables 2 and 3). No, any concomitant medication was used in during the study, and no any adverse effect was reported or noticed clinically during the study.

### DISCUSSION

*Panchguna taila* is indicated in *Sandhivata* (vitiating *vata* in joints)<sup>6</sup> and has been found beneficial in cervical spondylosis owing to its *Vata shamak* properties.<sup>7</sup> *Guggulu* has been indicated in the management of *Vata vyadhi* in classical Ayurveda text.<sup>8</sup> *Panchamrit Lauha Guggulu* is mentioned in text *Bhaishajya Ratnavali* for management of *Mastishka Roga*, various *Snayu Roga*, and *Vata*

Table 1: Subjective parameter

Assessment scale			
S. N.	Symptoms	Severity of symptoms	Grade
1.	Pain/stiffness	Absent	0
		Mild	1
		Moderate	2
		Severe	3
2.	Headache	Absent	0
		Mild	1
		Moderate	2
		Severe	3
3.	Numbness/tingling Sensation in arms	Absent	0
		Mild	1
		Moderate	2
		Severe	3
4.	Pain with neck movement	Absent	0
		Mild	1
		Moderate	2
		Severe	3
5.	Weakness of arms	Absent	0
		Mild	1
		Moderate	2
		Severe	3
6.	Dizziness	Absent	0
		Mild	1
		Moderate	2
		Severe	3

**Table 2:** Showing improvement in visual analog scale

Symptoms	Mean of	Mean of	Percentage improvement
	scores BT	scores AT	
Pain/stiffness	1.64	0.39	76.22
Headache	0.87	0.21	75.86
Numbness/tingling sensation in arms	1.41	0.31	77.92
Pain with neck movement	1.56	0.35	77.6
Weakness of arms	0.73	0.31	57.49
Dizziness	0.88	0.29	66.86
Total	1.18	0.31	73.73

BT = Before treatment, AT= After treatment

*Vyadhi*. As cervical spondylosis have *Vata vitiation* in the cervical region and headache is one of the main symptoms as vitiated *Vata* is causing symptoms in *Mastishka* (head region) hence owing to these properties it may be beneficial in its management.<sup>9</sup> It has been found beneficial in cervical spondylosis.<sup>10</sup> By giving *vatahara* treatment orally (*Panchamritlauha guggulu*) and oil locally (*Panchaguna tail*), inflammation is reduced. This reduction in inflammation and spasm facilitates better blood supply and the improved nerve conduction to the affected area leading to symptomatic improvement and ultimately to improved functional status of the patient. This action may work on reverse pathogenesis aspect as *Stambha* and *Shoola* (stiffness and pain) are caused by vitiated *Vata* which incapacitates the patients. Oral treatment with *Panchamritlauha guggulu* preparation and local application of *Panchaguna taila* help to correct the *Vata vitiation*. Thus may help in reduction of stiffness and pain. Further studies are needed to understand the mode of action of the drug.

No special tests were done to assess the safety of drug as per the clinical records no any adverse effect was reported by the patient neither noted clinically. Drug intake palatability was good, and the oil was also non-staining and non-pungent hence patient compliance was good. Maximum improvement was seen in numbness/tingling sensation in arms followed by pain and stiffness.

## CONCLUSION

The results were highly significant although the sample size was very small (48) therefore more study on a large number of sample size is required. As the study was an observational retrospective cohort study on the patients being treated in the usual clinical setting, hence there

**Table 3:** Showing statistical analysis of overall improvement in severity score

S. N.	Duration	Mean (n = 48)		%	SD	't' value	'p' value	Result	
		B.T.	A.T.						
1.	14th Day	7.06	4.58	2.48	35.13	1.43	12.02	< 0.01	V.S.
2.	28th Day	7.06	3.31	3.75	53.12	1.93	13.46	<0.01	V.S.
3.	42nd Day	7.06	1.87	5.19	73.51	2.26	15.93	<0.01	V.S.

BT = Before treatment, AT= After treatment, SD = Standard deviation

was no control over any confounding factors. Moreover, objective parameters need to be studied for further consolidation of the efficacy of the drug, like MRI and other relevant investigations which were beyond the scope of the present study as the study was carried out in a usual clinical setting. This study may provide preliminary evidence for a further clinical study to further consolidate the findings.

## REFERENCES

- Hertling D, Kessler RM. Management of common musculoskeletal disorders: Physical therapy principles and methods, 3rd ed. Philadelphia: Lippincott Williams and Wilkins; 1996. p.528.
- Vaidya Jadavji Trikamji Acharya, editor. Charaka Samhita of Agnivesha, Sutra Sthana, Ch. 20, Ver. 11, 4th ed. Varanasi: Chaukhambha Sanskrit Prakashan; 1981. p.113.
- Ibidem. Charaka Samhita of Agnivesha, Chikitsa Sthana, Ch. 28, Ver. 20-24. p.617.
- Ibidem. Charaka Samhita of Agnivesha, Chikitsa Sthana, Ch. 28, Ver. 58-59. p.619.
- Anonymous. The Ayurvedic Pharmacopoeia of India, Part II (Formulations), Vol. I, 1st ed. New Delhi: Department of AYUSH, Ministry of Health and Family Welfare, Government of India; 2007. p.59-60.
- Ibidem. The Ayurvedic Pharmacopoeia of India, Part II (Formulations), Vol. I. p. 111-112.
- Bharti, Katyal S, Kumar A, Makhija R, Devalla RB. Clinical observation on Greeva Stambha (cervical spondylosis) Chikitsa. Ayu 2010;31(2):218-222.
- Vaidya Jadavji Trikamji Acharya, editor. Charaka Samhita of Agnivesha, Sutra Sthana, Ch. 28, Ver. 241-242, 4th ed. Varanasi: Chaukhambha Sanskrit Prakashan; 1981. p.627.
- Shastri A D, editor. Bhaishajya Ratnavali of Govind Das Sen, 18th ed. Varanasi: Chaukhambha Publication; 2012. p.1220.
- Patil S. Evaluation of Efficacy of Panchamrita Lauha Guggulu in Management of Cervical Spondylosis (ManyagataVata). International Ayurvedic Medical Journal 2015;3(5):1352-1360.

## हिंदी सारांश

### सरवाइकल स्पोंडिलोसिस (ग्रीवा स्तम्भ) की चिकित्सा में पंचामृत लौह गुग्गुल और पंचगुण तैल का नैदानिक निरीक्षण

ओम आर शर्मा, सुमीत गोयल, दीपशिखा आर्या, विनोद के लवानिया

**परिचय:** सरवाइकल स्पोंडिलोसिस समाज में एक व्यापक समस्या के रूप में उभर रहा है। आयुर्वेद के अनुसार, ग्रीवा स्तम्भ लक्षणों में सर्वाइकल स्पोंडिलोसिस से मिलता है, जो की एक वातज नानात्मज विकार है।

**विधि:** सरवाइकल स्पोंडिलोसिस के 48 रोगियों के साथ एक खुले लेबल के रेट्रोस्पेक्टिव कोहोर्ट डिजाइन के अनुसार अध्ययन किया गया, जिनका क्षेत्रीय आयुर्वेद पोषण जन्य अनुसंधान संस्थान – गांधी भवन, मंडी हिमाचल प्रदेश (केन्द्रीय आयुर्वेदिय अनुसंधान परिषद, आयुष मंत्रालय, नई दिल्ली) की ओपीडी में मार्च, 2013 और जून 2013 के बीच सामान्य नैदानिक सेटिंग में इलाज किया गया, का अध्ययन किया गया। पञ्चामृत लौह गुग्गुल (2 गोली सुबह श्याम सुखोष्ण जल से) और पञ्चगुण तैल (10 मिलीलीटर अभ्यंग दो बार दैनिक) प्रत्येक रोगी को दिया गया था। रोगियों का अवलोकन उपचार के बाद 14वें, 28वें और 42वें दिन किया गया था। मूल्यांकन सरवाइकल स्पोंडिलोसिस के नैदानिक लक्षणों के स्केल पर किया गया था।

**लक्ष्य:** सरवाइकल स्पोंडिलोसिस से पीड़ित रोगियों में दवा की सुरक्षा और प्रभावकारिता का आकलन करना।

**परिणाम:** सभी रोगियों में नैदानिक लक्षणों में सुधार मिला। अधिकतम लाभ सुन्नापन, जकड़ाहट एवम् शूल के लक्षणों में देखा गया था। सांख्यिकीय रूप से समग्र सुधार उपचार के 42वें दिन के बाद उत्तम था।

**निष्कर्ष:** अध्ययन में आशाजनक परिणाम मिले हैं, हालांकि confounding कारकों को नियंत्रित नहीं किया गया था और यह सामान्य चिकित्सीय सेटिंग में इलाज किया गया था। रोगियों पर एक अवलोकन संबंधी अध्ययन था, लेकिन यह व्यापक नैदानिक अनुसंधान के लिए प्रारंभिक आंकड़े प्रदान कर सकता है और परिणामों की अधिक मान्यता प्रदान कर सकता है।

