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

1Om R Sharma, 2Sumeet Goel, 3Deepshikha Arya, 4Vinod 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 Panchamritaulauha guggulu (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, Greeavagraha, Vata disorder.


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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.1 According to Ayurveda, Greevastambha simulates cervical spondylosis, a disorder of Vata dosha or Vataj nanatmaj vikara2 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 prabhratinamantah 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)3 Bhdelastoda-arti (Pain), Vitiated vata gets situated in Greevagata sandhi (cervical intervertebral joints) and produces Greevastambha or cervical spondylosis. The two main factors for the vitiation of Vata are Margavarodha (obstruction of vitiated dosha) and Dhatoxshaya (diminished dhatu).4 Vata hara management aimed at correction of vitiated dosha in the cervical region may prove to be beneficial for the improvement of cervical spondylosis.

AIM

To assess the safety and efficacy of Panchamritaulauha 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
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 Panchamritalauha gugglu 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 medication and those who were on prescription medication for this condition. Patients with neck pain and other degenerative signs due to other reasons like spondylohistesis, 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.
- Panchamritalauha Guggulu:5 Two tabs (360 mg each tablet) with lukewarm water twice daily for six weeks (42 days).
- Panchguna Taila:6 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 signs 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
Panchaguna taila is indicated in Sandhivata (viti at vata in joints)⁶ and has been found beneficial in cervical spondylosis owing to its Vata shamak properties.⁷ Gugglu has been indicated in the management of Vatavyadhi in classical Ayurveda text.⁸ Panchamrit Lauha Guggulu is mentioned in text Bhaishajya Ratnavali for management of Mastishka Roga, various Snayu Roga, and Vata

<table>
<thead>
<tr>
<th>Table 1: Subjective parameter</th>
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<tr>
<td>Assessment scale</td>
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<tr>
<td>1.  Pain/stiffness</td>
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<td>2.  Headache</td>
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<td>3.  Numbness/tingling Sensation in arms</td>
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<td>4.  Pain with neck movement</td>
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<td>5.  Weakness of arms</td>
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<td>6.  Dizziness</td>
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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.\textsuperscript{9} It has been found beneficial in cervical spondylosis.\textsuperscript{10} By giving vatahara treatment orally (Panchamritlauha guggulu) and oil locally (Panchaguna taila), 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 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**

हिंदी सारांश
सर्वाइकल स्पेसियलिस्ट्स (प्रीवा सत्त्व) की चिकित्सा में पंचमृत लौह गुगुल और पंचगुण तैल का नैदानिक निरोधक

अंजन आयु, सुमित गोपाल, दीपकशिंदा आर्य, विनोब के लबानिया

परिचय: सर्वाइकल स्पेसियलिस्ट्स समाज में एक यात्रिक समस्या के रूप में उमर रहा है। आयुआई से अनुसार, प्रीवा सत्त्व लक्षणों में सर्वाइकल स्पेसियलिस्ट्स से स्पष्ट है, जो की एक वाल ‘तनाव’ विकास है।

विषय: सर्वाइकल स्पेसियलिस्ट्स के 48 रोगियों के साथ एक मुख्य लेखन द्वारा रिपोर्ट कोरिजों के अनुसार अध्ययन किया गया, जिनमें वैज्ञानिक आयुआई योजना जन्म अनुसंधान संस्थान – बाहुल भारत, मंडल हिमालय प्रदेश (बैर्न म्यूनिसिपल अनुसंधान परिषद, आयुआई नन्दी, नई दिल्ली) की ओर से 2013 और 2017 के बीच सामान्य नैदानिक सेटिंग में इलाज किया गया।

प्राचीन जीवन गुगुल (2 गोपी सुवर्ण श्याम सुभोजन जल से) और पंचगुण तैल (10 मिलीलिटर अनुसार दो बार देना) प्रादेशिक रोगियों को दिया गया था। रोगियों का अनुसंधान उपचार के बाद 14वें, 28वें और 42वें दिन किया गया था।

लक्ष: सर्वाइकल स्पेसियलिस्ट्स से श्रीराम रोगियों में इलाज की सुधार और प्रभावकारिता का आकर्षण करता।

परिणाम: सभी रोगियों में नैदानिक लक्षणों में सुधार भिंता। अधिकांश मान सुननाम, जकाहट एवं गूढ़ के लक्षण में देखा गया था। साथियों के रूप में समर्पित उपचार के माध्यम से 42वें दिन के बाद लक्षण कम हो गए।

निष्कर्ष: अनुसार में आयुआई परिणाम संरचना है, हालांकि confounding कारकों को निरीक्षित नहीं किया गया था और यह सामान्य अध्ययन सेटिंग में हल्का है। रोगियों पर एक अनुसंधान संस्थान अध्ययन था, लेकिन यह वाताक नैदानिक अनुसंधान के लिए प्रारंभिक आंकड़े प्रदान कर सकता है और परिणामों की अवधि नीचे प्रदान कर सकता है।