

## Evaluation of the Effect of *Manyabasti* and *Sarvangatailadhara* in *Manyagata vata* (Cervical Spondylosis)

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### Abstract

Present clinical study was designed to assess the efficacy of *Manyabasti* and *Sarvangatailadhara* in reducing the sign and symptoms of cervical spondylosis. Total 11 patients of cervical spondylosis were registered in the OPD and IPD of Samadhan Panchakarma Hospital, Nagpur, India. They were subjected to the treatment schedule of 15 days. During this period *Manyabasti* was done for 15 min and *Sarvangatailadhara* for 30 min by the mixture of *Arogya taila*, *Asthiposhak taila* and *Indrayani taila* (2:1:1). All these medicated oils were prepared in their own *Rasashala* as proprietary medicine. Assessment were done with regard to pain, neck movement (flexion and extension) and hand grip strength. These were done before and after the treatment. The results were assessed on the basis of symptomatic improvement using visual analog scale. The study reveals that *Manyabasti* and *Sarvangatailadhara* were effective in cervical spondylosis.

**Keywords:** Cervical Spondylosis, *Manyabasti*, *Sarvangatailadhara*, Visual Analog Scale

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### INTRODUCTION

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 facet joints, longitudinal ligaments, and ligamentum flavum.

Spondylosis progresses with age and often develops at multiple interspaces [1]; not only structural but functional derangement of the cervical spine also takes place. According to Ayurveda, *Manyastambha* is *Vataj Nanatmaja vyadhi* [2].

The *Poorvaroopas* of *Vata Vyadhis* are *Avyakta*. When they manifested, it is their *atmaroopa* [3]. Some of the signs and symptoms of *Manyastambha* viz. *Pani-Prishtha Shirograha*, *Gatrasuptata*, *Greevayahundanam* and *Bhedastoda-arti* are comparable to cervical spondylosis. According to Sushruta, in the initial stage of

*Manyastambha*, there is *vata avarana* by *kapha*, later it turns purely in *vataj vyadhi* [4].

### AIM AND OBJECTIVES

The present clinical study was aimed to evaluate the effect of *Manyabasti* and *Sarvangatailadhara* by the mixture of three medicated oils (*Arogya taila*, *Asthiposhak taila* and *Indrayani taila*) in the patients of *Manyagata vata* (cervical spondylosis).

### MATERIALS AND METHODS

Total 11 patients with the classical signs and symptoms of *Manyastambha* (cervical spondylosis) i.e., pain at the nape of neck, restricted neck movement, and neck stiffness, were registered on the basis of symptomatology from Gahukar's Panchakarma Hospital, Nagpur, irrespective of sex, religion, occupation etc.

X-Ray cervical spine and lateral view showing changes of cervical spine. Written consent was

taken from each patient after giving him/her detail information about the treatment.

#### Inclusion Criteria

1. Patients of either sex with presenting symptoms of cervical spondylosis.
2. Patients with the age group between 20–70 years.

Clinical symptoms with radiological changes were suggestive of the disease.

#### Exclusion Criteria

1. Patients of age group below 20 and above 70 years.
2. Stenosis of the spinal canal.
3. Myelopathy.
4. Myofacial pain syndrome.
5. Patients suffering from any acute/infectious/metabolic/chronic diseases like rheumatoid arthritis, SLE, ankylosing spondylitis, diabetes mellitus, Cushing syndrome, thyrotoxicosis, Addison's disease, tuberculosis of bone, hepatic and cardiac failure.

#### Criteria for Diagnosis

Criteria of diagnosis were based on the signs and symptoms of *manyagata vata* (cervical spondylosis) and relevant physical examination. In addition to this, MRI test was carried out in all the patients to confirm the diagnosis as well as to exclude the normal patients. Total 11 patients fulfilling the criteria of diagnosis of cervical spondylosis were selected. They were treated with *Manyabasti* and *Sarvangatailadhara*. All the patients completed the schedule of the treatment.

#### Duration of Treatment

*Manyabasti* and *Sarvangatailadhara* were given for 15 days with a mixture of *Arogyataila*, *Asthiposhak taila* and *Indrayani taila* for 45 min daily. Patients were advised to avoid *apathy* like *Guru*, *Abhishandi ahar*, day sleep, high awakening, suppression of natural urges, medicines like corticosteroids, anticonvalescent, smoking, heavy exercise, fasting and other etiological factors which causes aggravation of *vata*.

#### Criteria for Assessment

Improvement in the patients was assessed on the basis of relief in the signs and symptoms of the disease. All the signs and symptoms were

given scoring depending upon their severity to assess the effect of the treatment objectively.

#### Procedure of Sarvangatailadhara

##### Purvakarma

The mixture of three oils viz., *Asthiposhak taila*, *Arogya taila*, and *Indrayani taila* (2L+1L+1L, respectively) were heated indirectly on water bath. Droni made of wood, steel vessel, gas cylinder, stove etc. were kept ready. Two trained masseur were serving the patients.

##### Pradhan karma

The mixture of warm oils in a measured quantity was taken. Patients were kept in tailadroni in sitting position with both the legs extended. On the head of the patient, *Amalaki taladharan* was done.

Eyes were closed with cotton pads. Masseurs were standing on both sides of the droni. The *Abhyanga* was done and the oil was squeezing in the droni with the help of cotton cloth (18x18cm) from the height of 4–6 angule. It was done for 45 min.

##### Paschat karma

After the procedure, the *taila* was drained out of droni through the hole at the end of droni. The area was wiped off and cleaned properly and the patient was shifted to OPD to take rest for 1 hour.

#### Procedure of Manyabasti

##### Purvakarma

Black gram powder was mixed with sufficient quantity of water to make a paste (dough). It is rolled into flat slab-like structure. Patient was lying down in prone position.

##### Pradhankarma

Ring of black gram paste kept over the cervical region in a circular manner. The mixture of oils was heated in water bath up to warmth.

This oil is then poured in a ring. Temperature was maintained by frequently adding the warm oil.

##### Paschat Karma

Oil is removed by dipping cotton and squeezing in a container. Dough was removed

and the area was wiped off and cleaned properly.

## Parameters of Study

### 1. Neck Pain

a)	No pain	0
b)	Pain in the neck is mild that aggravates with neck movement.	1
c)	Pain in the neck is severe aggravates with movement	2
d)	Pain in the neck is mild or severe radiating to arm	3

### 2. Restricted Neck Movements

#### A) Flexion

a)	No restriction i.e., able to touch interclavicular line	0
b)	Up to 2 cm difference between chin and interclavicular line	1
c)	2–4 cm difference between chin and interclavicular line	2
d)	More than 4 cm difference between chin and interclavicular line	3

#### B) Extension

a)	Normal	0
b)	Movement up to 120°	1
c)	Movement up to 110°	2
d)	Movement less than 110°	3

### Hand Grip Strength

a)	<i>Sahaj</i>	0
b)	<i>Alpaprayasen</i>	1
c)	<i>Atiprayasen</i>	2
d)	<i>Mushtibanbhan nati</i>	3

## OBSERVATION

The observed values of the clinical parameters on the patients of cervical spondylosis are as follows:

**Table 1: Sex of the Patients.**

No. of Patients	No of Males	No of Females
11	08 (72.72%)	03 (27.27%)

**Table 2: Age of the Patients.**

No. of Patients	Age Group (years)
2 (18.18%)	20–40
3 (27.27%)	40–50
3 (27.27%)	50–60
3 (27.27%)	60–70

**Table 3: Occupation of the Patients.**

No. of Patients	Occupation
03 (27.27%)	Housewife
05 (45.45%)	Government Servant
01 (9.09%)	Student
03 (27.27%)	Retired

**Table 4: Koshta of Patients.**

No. of Patients	Koshta
05 (45.45%)	<i>Krura</i>
04 (36.36%)	<i>Mrudu</i>
02 (18.18%)	<i>Madhayam</i>

**Table 5: Agni of Patients.**

No. of Patients	Agni
07 (63.63%)	<i>Mandagni</i>
03 (27.27%)	<i>Madhyamagni</i>
01 (9.09%)	<i>Tikshnagni</i>

**Table 6: Satva of Patients.**

No. of Patients	Satva
02 (18.18%)	<i>Pravar</i>
04 (36.36%)	<i>Madhyam</i>
05(45.45%)	<i>Avar</i>

## RESULTS

### Reverse Pathogenesis

*Stambha* and *Shoola* (stiffness and pain) are caused by vitiated *Vata* which incapacitates the patients. *Manyabasti* and *Sarvangatailadhara* using mixtures of three medicated oils reduces *Vata* vitiation. Moreover, *Snehana* in all forms results in suppression of *Vata*. The *Snigdha* and *Ushna Gunas* are against the *Ruksha* and *Sheeta gunas* of *Vata* [5].

## DISCUSSION

In the present study, pain in the neck (at rest), headache and pain with neck movements, numbness/tingling sensation with or without weakness of the arm and dizziness were the commonly observed symptoms in the patients. Most of the aforesaid symptoms were due to muscle spasm and nerve compression.

The results were assessed on the basis of symptomatic improvement using visual analog scale. Observations from the above tables

reveals that cervical spondylosis was found more in males (Table 1) within the age group of 40–70 years (Table 2) who are engaged in sedentary lifestyle (Table 3).

Persons having *Krura koshta* (Table 4), *Mandagni* (Table 5) and *Avar stave* (Table 6) were more prone to the disease.

**Table 7: An Assessment for Subjective Response in Patients Using Visual Analogue Scale.**

Total No. of Patients	Symptom	Marked Response		Moderate Response		Mild Response		No Response	
		No.	%	No.	%	No.	%	No.	%
11	Pain	7	63.63	3	27.27	1	9.09	-	-
11	Stiffness	6	54.54	3	27.27	2	18.18	-	-
08	Occipital Headache	4	50.00	2	25.00	1	12.50	1	12.50
07	Giddiness	4	57.14	2	28.57	-	-	1	14.28
06	Radiating Pain	3	50.00	3	50.00	-	-	-	-

**Table 8: Effect of Manyabasti and Sarvangatailadhara on Some Parameters Showing Level of Significance.**

Symptoms	Mean BT	Mean AT	%Relief	SD	SEM	p value
Pain	2.06	0.60	70	0.81	0.22	0.001
Stiffness	2.13	0.53	74	0.88	0.21	0.001
Hand grip strength	0.53	0.20	0.64	0.44	0.12	0.01

Data pertaining to Table 7 shows marked response in neck pain and stiffness in 63.63% and 54.54% cases, respectively. Fifty percent cases were recovered from occipital headache and 57.14% from giddiness. Mild and moderate response is seen with radiating pain in 50% cases. Data pertaining to Table 8 shows that the mean of the parameters like pain, stiffness and hand grip strength was reduced due to treatment by 70%, 74% and 64%, respectively which are highly significant at the p value of 0.001, 0.001 and 0.01, respectively. Improvement was observed in most of the symptoms due to reduction in inflammation and spasm provided by *Vatahara* treatment using mixture of three medicated oils which works on the liposomal drug delivery system. Liposomes are capable to incorporating a variety of hydrophilic and hydrophobic drugs, to enhance the accumulation of drug at the administration site, and reduce the side effects. Liposomes can provide sustained and/or controlled release of entrapped drug. Liposomal system allows for a high accumulation of drug in the skin, with relatively low permeation flux as compared to the conventional dosage form [6].

*Snehana* causes nourishment of *dhatus*, increases *Agni-bala* and increase in strength of the body [7]. The oil absorption from skin is directly influenced by *Bhrajakapitta*, arterial-venous capillaries and lymphatics with the help of osmosis mechanism. The bony ends and nerve endings at the site of cervical vertebral region will get nourishment and oleated which build resistance to injury and quicker healing. The physiological effect of temperature occurs at the site of application of heat and in distant tissues. Locally there is an increase in blood flow with associated capillary dilatation and increase capillary permeability. Tissue metabolism increases initially and there may be changes in pain threshold. Distant changes include vasodilation and reduction of muscle spasm due to skeletal muscle relaxation [8].

## CONCLUSION

Conservative management with *Manyabasti* and *Sarvangatailadhara* reduces neck stiffness, radiation of pain and numbness thus improves the range of cervical spine more effectively. *Manyabasti* can decrease the rate of degeneration of cervical spine.

## REFERENCES

1. Management of common musculoskeletal disorders. In: Allen A, Domr L, editors. *Physical therapy principles and methods*. 3rd Edn. Philadelphia, PA: Lippincot Williams and Wilkins; 1996. 528p.
2. Acharya YT, Ed. *Charak Samhita of Agnivashacharya* elaborated by Charaka and Drudhabala with Ayurveda Dipika Commentary by Chakrapanidatta. Reprint Edn. Varanasi: Chaukhambha Surbharti Prakashan; 2008. *Sutrssthana* 20/11.
3. Yadavji TA, Ed. *Charak Samhita of Agnivashacharya*, elaborated by Charaka and Drudhabala with Ayurveda Dipika Commentary by Chakrapanidatta. Reprint Edn. Chaukhambha, Varanasi: Surbharti Prakashan; 2008. *Chikitsasthana* 28/19.
4. Yadavji TA, Kavyatirtha NRA, Eds. *Sushruta Samhita with Nibandhasangraha*. Commentary by dalhanacharyaand Nyayachandrikapanjika of Gayadasacharya. Reprint Edn. Varanasi: Chaukhambha Surbharti Prakashan; 2008. *Sutrasthana* 1/67.
5. Bharti , Katyal S , Kumar A, *et al*. Clinical observation on *Greeva Stambha* (cervical spondylosis) *Chikitsa*. *Ayu*. 2010; 31: 218–22p.
6. Singh N, ChaudharyA. A comparative review study of *Sneha Kalpana (Paka)* vis-a-vis liposome. *Ayu*. 2011; 32(1): 103–8p.
7. Yadavji TA, Ed. *Charak Samhita of Agnivashacharya* elaborated by Charaka and Drudhabala with Ayurveda Dipika Commentary by Chakrapanidatta. Reprint Edn. Varanasi: Chaukhambha Surbharti Prakashan; 2008. *charak chikitsastan* 28/81.
8. Vanashree JM. Evaluation of the effect of dual method of Kukkutanda sweda in manyastambha: A comparative clinical study. *P.G Dissertation 2011–2012*. Bengaluru, India: RGUHS; 2012.