JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue
JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)
An International Scholarly Open Access, Peer-reviewed, Refereed Journal

"A CLINICAL STUDY TO EVALUATE THE THERAPEUTIC EFFECT OF MASHA TAILA NASYA ALONG WITH MASHA BALADI KWATHA IN MANYASTHAMBA "

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ABSTRACT

In today's era, human life is more stressful. Due to change in life style, professional stress, travelling, food habits, peoples are more susceptible for various degenerative disorders like *Manyastambha*. *Manyastambha* is the clinical entity in which the back of neck becomes stiff or rigid, pain, *Stambha* in cervical region and movement of neck are hampered. It is a commonest degenerative disease by which larger group of community has been affected. Manyastambha has been enumerated in eighty *Nanatmja Vyadhis* well as *Urdhwajatrugata Vikaras.*It can be clinically co-related with cervical Spondylosis in modern medicine.Cervical Spondylosis is a degenerative condition of the cervical spine. *Ruk* and *Stambh*a are the primary symptoms. If severe, it may cause pressure on nerve roots with subsequent sensory or motor disturbances. It was a clinical study with a pre and post design in 30 patients who were diagnosed with *Manyastamba*. After examination *Masha Taila marsha nasya* for 7 days with *mashabaladi kwatha* was given for 14 days. The assessment criteria were noted before and after treatment and on follow-up. Among the subjective and objective parameters, in the Overall effect of treatment in Manyastamba, out of 30 patients in this study, In Overall effect of treatment in *Manyasthamba*, out of 30 patients in this study, 19 patients (63.33%) were getting Marked improvement ,9 patients (30%) were getting Moderate improvement and 2 patients (6.66%) were getting Complete RemissionOverall effect of the treatment is 65.87 %.

Keywords :- *Manyastambha* , Cervical Spondylosis , *Masha Taila , Mashabaladi kwatha*

INTRODUCTION:

Cervical spondylosis is degeneration of the intervertebral discs and osteophyte formation. [2] It is a degenerative condition and nowadays it's common due to current lifestyles like continuous sitting or standing postures, working on computers for hours ,lack of exercise,improper sitting and sleeping postures and using large pillows. It is becoming common in early to middle aged persons also. Cervical spondylosis or osteoarthritis of the cervical spine produces neck pain radiating to the shoulders or arms with headache (posterior occipital region). Narrowing of the spinal canal by an osteophyte, ossification of the posterior longitudinal ligament or a large central disc may compress the cervical spinal cord.[3] Common causes of cervical spondylosis are bone spur,ie, overgrowth of bone, Dehydrated spinal discs, Herniated discs, Injury, Trauma, Ligament stiffness, over use, etc.

[4] Pathology starts at the intervertebral disc with degeneration of disc resulting in the compression of the cervical nerve along with space reduction. It leads to pain [5], stiffness in the neck, pain radiating to shoulders, forearm, headache, vertigo, paresthesia at the base of the thumb, etc. [6] Age, gender, and occupation are the main risk factors for cervical spondylosis. [7] Nearly 50% of people over the age of 50 and 75% of those over the age of 65 have typical radiographic changes of cervical spondylosis. [8] Analgesics and physiotherapy will help to a certain extent but are not the ultimate cure for cervical spondylosis. Surgeries are more expensive and again there are chances of recurrence as well. [9] In modern medicine treatment includes physical therapy (traction, exercise) NSAIDs, muscle relaxants, cervical collar, etc. [10] Cervical spondylosis can be correlated with Griva Stambha in an Ayurvedic perspective. [11]Griva Stambha is one of the eighty Nanatmaja Vatavyadhi. [12] The symptoms of Vata Vyadhi (various neurological and musculoskeletal disorders) are Sankocha (contraction), Stambhana (stiffness) of joints and Shoola in the joints as well as in bones, Lomaharsha (horripilation), Graham (spasticity) of hands, back as well as the head, Shosha (atrophy) of body parts, Spandana (trembling of the body), Gatrasuptata (numbness), Hundana (shrinking) of head, nose, eyes, clavicles region and neck, Bheda (breaking pain), Toda (pricking pain), Kampana (trembling), Bala Indriya Bhramsha (loss of strength and sensory function), etc. [13] Cervical spondylosis may also be considered as manyagata vata, especially in degenerative condition. Pain during the movements, flexion-extension of a joint along with swelling and crepitation on joint movements is the typical clinical features of sandhigatvata. [14]. Vyaana Vayu is responsible for the movements of the body. Neck is a body part above clavicle so in Ayurveda literature it comes under Urdhvajatrgata Vikara (diseases above neck region). Nasya karma (Nasal Medication) is widely employed in Ayurveda. It is the only therapeutic measure among Panchakarma which is instilled into the nostrils and has a direct access to head. In all the Urdhvajatrugata Vikaras, all the Acharys unanimously highlighted Nasya Karma to be effective. Acharya Charaka mentions all Urdhvajatrugatavikara specially Vatajavikara like Manyastambha etc. are to be treated with Nasya Karma.While Acharya Vagbhata appreciates Nasya as useful in keeping Greeva and Skandha (Neck & shoulder) healthy. In Cervical Spondylosis, degeneration can be implied as Apatarpana (emaciation) according to Ayurveda. Hence condition of Cervical spondylosis which is degenerative one need Brimhana (nourishing) therapy. Vagbhata specifically mentioned Brimhana Nasya being useful in treating Vataja Shoola (pain) like conditions. [15] Keeping all these factors in mind, it was hypothesized that Brimhana Nasya Karma may prove effective in relieving symptoms of Manyastambha like 'Ruk' (pain) and 'Stambha' (rigidity) in the patients of Cervical spondylosis.

Masha taila is one of the powerful Ayurveda oil, widely used for many neurologicalconditions. *Masha* means black gram, which is the main ingredient of this oil. It is used both for external and internal administration. It contains a non veg ingredient.

Masha Taila, avariety of *Brimhana Sneha* exclusively indicated for the purpose of *Nasya* comprises *Masha, Bala,Dasamoola, Rasna, Yava kola kuluttha as KashayaDravya, Atmagupta, Saindhava, Satapuspha, Erandamoolaas Kalka Dravya, Chaagamamsa* and cow's milk as Drava Dravya . The ingredients of this formulation possess Guna like Snigdha, Ushna which are antagonistic to Guna of Vata and thus palliates theVata Dosha and yield relief from the condition like *Manyasthambha* . Moreover *Masha Taila* is Vata Kaphaghna, Shulahara and Shotha. So, there is a need to consider the administration of *Nasya Karma* in the management *of Manyasthambha* (Cervical spondylosis).

STUDY DESIGN – It is an open clinical study

DESIGN OF THE STUDY:

- Study Type : Interventional
- Estimated enrolment : 30 participants
- Allocation : Non-Randomized

- Endpoint Classification: Efficacy Study
- Intervention Model : Single group
- Masking : Open label study
- Primary Purpose : Treatment

Sources of Data

- **Sample source:-**Patients with classical features of *Manyasthamba* had been selected from OPD/IPD dept in KAMC Mangalore.

SAMPLE SIZE -30 patients fulfilling the diagnostic and inclusion criteria of either sex selected and assigned in a group.

SELECTION CRITERIA-

a) Diagnostic criteria-

Patients with classical signs and symptoms of *Manyasthamba*, such as *Ruk*, *Sthamba* in *Manya pradesha* selected for clinical trials.

b)Inclusion criteria-

- The patients with classical symptoms of *Manyastamba* and cervical spondylosis.
- Patients from the age group in between 20 to 70 years irrespective of sex,occupation,race and socio-economic status.
- Patient fit for *Nasya karma*

c) Exclusion criteria-

- Patient having associated condition like Fibrositis, Rheumatoid spondylosis, Ankylosing spondylosis will be excluded.
- Patient contraindicated for *Nasya karma*
- Patient below 20 years of age and above 70 years of age.
- Patients associated with severe systemic disorders that interfere the line of treatment.

d) Intervention-

30 patients of *Manyasthamba* were selected and subjected to administration of *mashataila marsha Nasya* dosage of 8 bindus 7 days in the morning and *mashabaladi kwatha* 48 ml before food twice a day for 14 days.

Selection of drug- the trial drug collected from the surrounding area and local market after properly identified.

Duration and Follow Up

- Treatment duration -: 7 days marsha Nasya along with 14 days kwatha pana.

- Follow up period -: 7 days (after the completion of treatment)
- Total study duration -: 28 days

Assessment criteria

The improvement in the patient was assessed on the basis of relief in the signs and symptoms of the disease.

Assessment of the condition was done based on the detailed Proforma adopting standard method of scoring of subjective and objective.The parameters of signs and symptoms along with the investigation will be scored on the basis of standard method and analyzed statistically using paired T test and wilcoxons method.

DATA COLLECTION

Patients were thoroughly examined both subjectively and objectively. Detailed history pertaining to the mode of onset, previous ailment, previous treatment history, family history, habits, Astavidha pareeksha and Dashavidha pareeksha and physical examination findings were noted.

Subjective parameters

- Rukin Manysapradesha
- Sthamba in Manyapradesha

Objective parameters

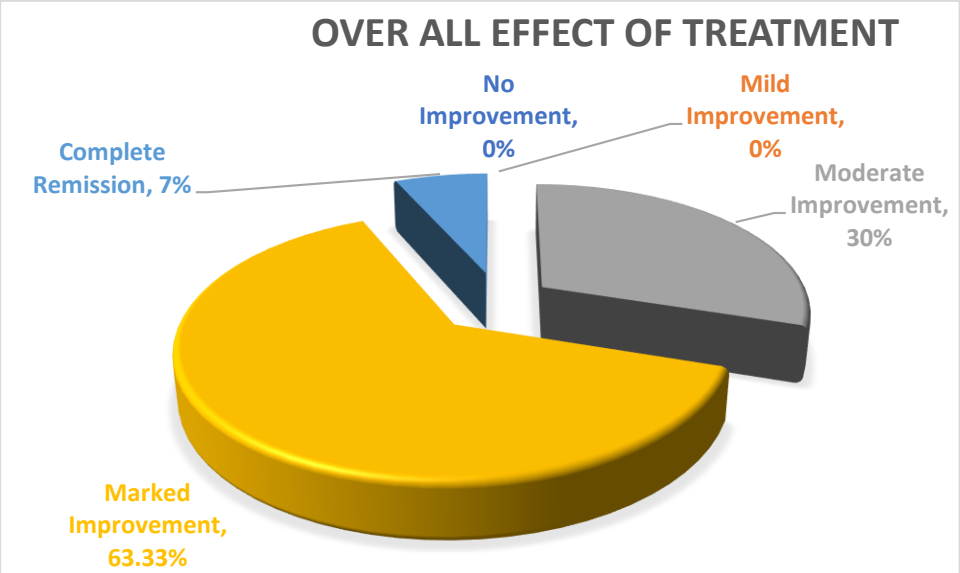
- Sthamba in Manyapradesha is accessed through Range of Movements of Cervical Spine.Measured by using Goniometer and based on degree obtained by using goniometer,spasticity values analyzed.
    - Flexion
    - Extension
    - Right lateral flexion
    - Left lateral flexion
    - Right lateral flexion.

OBSERVATIONS AND RESULTS

The observations give a detailed descriptive statistical analysis about all the 30 patients suffering from *Manyastamba* according to their Age, Sex, Religion, Education, Socioeconomic status, Marital status, Occupation, Duration of illness, Ahara, Prakrithi.

OVERALL EFFECT OF TREATMENT		
Grading	**Relief in Percentage**	**Relief in Patients**
No Improvement	0%	0
Mild Improvement	1-30 %	0
Moderate Improvement	31 – 60%	9
Marked Improvement	61 – 99 %	19
Complete Remission	100%	2

In Overall effect of treatment in *Manyasthamba*, out of 30 patients in this study, 19 patients (63.33%) were getting Marked improvement ,9 patients (30%) were getting Moderate improvement and 2 patients (6.66%) were getting Complete Remission Overall effect of the treatment is 65.87 %.



Parameter	**Mean BT**	**Mean AF**	**Net Mean**	**SD**	**SE**	**T Value**	**P Value**
Pain	2.56	0.33	2.23	0.569	0.103	21.65	< 0.001
Flexion	1.4	0.5	0.9	0.711	0.129	6.976	< 0.001
Extension	1.566	0.566	1	0.643	0.117	8.517	< 0.001
Lateral Bending (Right)	1	0.33	0.66	0.66	0.120	5.531	< 0.001
Lateral Bending (Left)	1.3	0.566	0.733	0.069	0.125	5.825	< 0.001
Lateral Rotation (Right)	1	0.33	0.66	0.66	0.120	5.531	< 0.001

Lateral Rotation (Left)	1.3	0.566	0.733	0.69	0.125	5.825	< 0.001

A paired t test analysis on mean follow up values of each parameter was conducted. Pain showed a highly statistically significant reduction (p <0.001)at the follow up visit. Restriction in flexion and extension of neck was relived significantly (P<0.001) after treatment. Right and Left Lateral Bending showed significant (P<0.001)Right and Left Lateral rotation of the neck showed significant reduction in restriction (P<0.001) at the end of follow up visit. Among all parameters pain showed maximum reduction, as evidenced by the highest t value.

DISCUSSION

1. DISCUSSION ON *Manyasthambha*

***Nidana* : -**

Manyasthambha is one of the *Vataja Nanatmaja Vyadhi*. The *Samanya Nidanas* which are mentioned for *Vatavyadhi* in general can be considered to be the *Nidanas* for *Manyasthambha*.

The *Ahara* and *Vihara* which are mentioned in review are having similar *Gunas* to that of *Vata Gunas*. So by using those factors they will provoke the *Vata* and the other hand it is easy to understand that these factors are responsible for manifestation of the disease.

Here *Viharaja Nidana, Vishista Nidana* is very important regarding the *Manyasthambha*.

1. *Divaswapnam* : - It is evident that *Diwaswapna* causes *Kaphaprakopa*, which is involved in early stages of the disease to be more specific. It can be interpreted in terms of sleeping in uneven place, which causes *Srotoavarodha* and increases *Kapha* in *Manya* leads to *Manyasthambha*. Among 30 patients who underwent clinical trial 21 patients had the habit of *Diwaswapna*.

2. *Vishama Aasana Sthana*:- Here *Aasana* as *Upaveshanam* and *Sthana* as *Urdvavibhavanam*, which means the postural disturbances specifically with reference to persons sitting and standing up position, which in turn leads to improper position of *Manya*, this puts uneven pressure over the *Peshis* producing *Manyasthambha*. Among 30 patients who underwent clinical trial 20 patients had postural disturbance. That is improper posture in sitting or sleeping, excessive travelling etc. lead to the desease *Manyasthambha*.

3. *Urdwa Nireekshana*: - Looking upwards continuously in *Vakra* position leads minor trauma to the *Shira* which in *Manya Pradesha* and precipitates the symptoms.

In *Charaka Samhita Abigatham* of *Siras* had mentioned as one of the reasons for *Manyasthambha*. Among 30 patients who underwent clinical trial 9 patients had the *Nidana* as *Abhighata*. 9 patients working as labour because of that they having *Abhighata* to *Manya Shira*.thats leads to *Manyasthambha*.

Apart from the *Nidana* explained in the *Samhitas*, the present study reveals the other Nidana due to modernization of the lifestyle and living standards, those are found as .

1. *Yana* (Travelling): - Travelling has becomes unavoidable part of modern routine, Travelling for long distance causes *Vataprakopa*. It increases movements in body, give jerky movements, '*Chala' Guna* of *Vata* is increased and leads to diseases. In the present study 4 patients had *Yana* as *Nidana*. Among them 2 patients worked as driver and 1 patient go for long distance for his work that increase in *Vata Guna* and leads to diseases.

2. *PraVatasevana* (Exposure to wind):- When patient is suffering with *Manyasthambha*, if they were always sitting under fan for 6 – 8 hours at night or working places, increases *Ruksha* and *Chala* qualities in the body. It also causes obstruction in sweating and leads to aggravation of *Vata*. In the present clinical trial 15 patients had sedentary nature of work, they used to sit under the fan for long time and that caused the aggravation of pain.

3. Mental Stress and hurry:- These are also *Vata* aggravating factors. Improper planning of works and routine causes tremendous stress and hurry, which increases '*Rajoguna'* leading to increase in *Vata*, it is many times observed that mental stress increases pain in *Manya*. In the present clinical trial 10 patients had mental stress. 10 petients suffered from psychological factors, among them 2 patients suffered from *Shoka*, 1 patient suffered from *Bhaya* and 7 patients suffered from *Chinta* that to provocation of *Vata* which leads to *Manyasthambha*.

Analysis of overall effect of the treatment in the patients of *Manyasthamba* showed good improvement.

The *nasya* was done for 7 days with *masha Taila* as *Shamana Yoga and mashabaladi kwatha pana for 14 days* which was significant. None of the patients developed complications or any side effects during the course of the treatment, hence the treatment modality is safe and is of therapeautic value. The above said observations indicates that patients have shown marked improvement in all criteria of assessment of *Manyasthamba.*

In Overall effect of treatment in *Manyasthamba*, out of 30 patients in this study, 19 patients (63.33%) were getting Marked improvement ,9 patients (30%) were getting Moderate improvement and 2 patients (6.66%) were getting Complete Remission.

Masha Taila nasya and mashabaladi kwatha pana showed significant result, and P value is <0.001 in reducing pain and reducing stiffness.

Overall effect of the treatment is 65.87 %

Manyasthambha occurs by vitiated *Vata* and *Kapha Dosha* involvement in the *Siras* of *Manya* and due to over usage of neck muscles which makes aggravation of *Vata.*

The *Dravyas* constitutes which is having *Madhura Vipaka, Snigdha* and *Guru Guna*, which acts as *Vata Shamaka. Madhura Vipaka* nourishes the *Dhathus.*

Masha Taila nasya and mashabaladi kwatha having property of *Ushna Virya* and anti-inflammatory action, Because of *Ushana Guna* of *Dravyas* and *nasya and kwatha pana* help in pacifying *Vata, Kapha Avarana* was relieved and Once *Avarana* is relieved there was relieve of *Stambhana* at *Manya Pradesha* and that helps in free movement of neck and relief of pain.

CONCLUSION

- *Manyasthamba* is a condition where aggravated *Vata* lodges in the *Manya* region along with involvement of *Kapha* leads to *Sthabdhatha* (restricted movements) and *Shoola* (pain). Which can be correlated with cervical spondylosis.
- In Overall effect of treatment in *Manyasthamba*, out of 30 patients in this study, 19 patients (63.33%) were getting Marked improvement ,9 patients (30%) were getting Moderate improvement and 2 patients (6.66%) were getting Complete Remission

Overall effect of the treatment is 65.87 %. Result is statistically significant with P value < 0.001.

- Based on *Dosha* predominance *Masha taila nasya and mashabaladi kwatha* is effective in *Vata kapha* dominent condition.

- Based on the chronicity, *masha Taila nasya and mashabaladi kwatha* has shown more effect above 1 year, this may because of *Vata* dominance in this group.
- Based on severity *masha Taila* has shown better result in *Madhyama* and *Avara Vyadhi Bala* compaired to Pravara vyadhibala.
- In this study age group between 30-50 years were found to be affected more with *Manyasthamba*.
- The intervention is easy and medicine is cost-effective.
- *Masha Taila nasya and mashabaladi kwatha* is more effective to reduce the pain with 87.10% result.
- Hence we can conclude that the hypothesis H1 is accepted i.e. There was a significant effect of *Masha Taila Nasya* along with *Mashabaladi kwatha* in the management of *Manyastamba* (cervical spondylosis)

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