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CLINICAL EFFICACY OF DASHMOOL KWATH NASYA IN THE MANAGEMENT OF MANYASTAMBHA WITH SPECIAL REFERENCE TO CERVICAL SPONDYLITIS

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ABSTRACT

Background: Nasya is an essential therapeutic procedure as many of the courses of Ayurvedic treatment. It comes under the Panchashodhana karmas. It is necessary in all Urdhwa jathru vikaras. Nasya is effective for inducing immediate results and serves as a permanent cure. Cervical spondylotic change is frequently found in many asymptomatic adults, with 25% of adults up to the age of 40, 50% of adults over the age of 40 and 85% of adults over the age of 60 showing evidence of disc degeneration. Cervical spondylosis can be compared with Manyastambha based on signs & symptoms. Nasya is the simple techniques and ingredients are readily available & economical. Also, these are indicated in the management of Manyastambha and have no proven adverse effects. This study was intended to assess the efficacy of the Dashmool Kwath Nasya in the management of this disease. Method: Randomly, 30 patients of Manyastambha were selected and paired "t" test was used. Result: Statistically significant improvement was found in this study on post-follow-up. Conclusion: Dashmool Kwath Nasya is having a prolonged action as it is having highly significant results post follow up of treatment as compared to after treatment.

Keywords: Manyastambha, Dashmool Kwath, Cervical Spondylitis, Nasya

INTRODUCTION

Manyastambha is a Vataja Nanatmaja Vyadhi; the symptoms may include Ruk & Sthamba¹. The most common symptom is pain in the neck, worsening with exertion and relieved, in the early stages, by rest². This pain often radiates down to the hand, with the fingers becoming numb due to compression of the nerves that innervate the upper extremity. The brachial plexus is affected. The trapezius area becomes tender and painful. A nodule can form in the muscle due to chronic pressure. It may be compared with cervical spondylitis. These are osteoarthritis of the spinal joints of cervical and lumbar regions³. Here, the straightening of the two curved regions of the spine causes the nerve roots to emerge out of the spinal canal. This gives neurological symptoms depending on the type of nerve. Cervical spondylitis causes sensory/motor symptoms of posterior head and neck, shoulders, upper limb regions as pain, numbness, burning, weakness etc. Giddiness on neck movements and the intervertebral prolapsed are later complications⁴. The symptoms of cervical cord compression can sometimes be severe. The pain radiates down the right or left arm to the fingers, chest, and shoulder blades, depending on which side the nerve root is involved⁵. It can become continuous, making movements painful and limited. If the cervical vertebrae become unstable, the danger of cord compression is imminent, and, in some cases, the fusion of the bones may be warranted⁶, but this is rare. (Figure 1)

Acharyas deal with vata disorders as Vata Vyadhi includes the above discussed spinal originate problems, especially cervical spondylitis as Manyastambha. Indeed, the Manyastambha is a Vataja Nanatmaja Vyadhi referred to as the Siras in the neck region. Even though Manyastambha is a condition about the veins of the neck (Greevagata siras) with its signs and symptoms resemble cervical spondylitis.

As Nasya is the best for Urdhwajathrugata Vikaras and Manyastambha being one among them is practised here⁷. So, Nasya is believed to have a notable role in relieving the inflammatory condition and Stambhata within the cardinal feature of Manyastambha⁸. Therefore, this study has been undertaken to help the patients suffering from Manyastambha in our society and to evaluate the clinical efficacy of Dashmool Kwath Nasya in the management of Manyastambha with particular reference to cervical spondylitis.

MATERIALS AND METHODS

Study design: It is an open, simple, random clinical study having 30 patients. Paired 't'-test was used.

Source of data: Patients with classical features of Manyastambha had been selected from the OPD department in Late Dr. Pt. Shiv Shaktilal Sharma Ayurvedic Medical College and Hospital, Ratlam, Madhya Pradesh, after getting institute ethical committee

(IEC) approval. IEC study approved no-SSSAMC/AY/PG/PK0837/2011.

Therapy: Nasya Karma with Dashmool Kwath⁹

Instruments: Nasya asana (Chair/cot), Dropper, Stethoscope, Goniometer, Blood pressure apparatus

Preparation of trial drug Dashmool Kwath: The raw drugs (Table 1) were purchased from the local market. The Kwath was prepared by boiling the colloidal solution of the coarse powder of the drug mixture in 16 times water till 1/4th of the initial mix was left, and the remaining mixture was filtered to obtain Dashmool Kwath (Table-1). In equal measure, the powder of these drugs was made into Kwath, as indicated in the literature.

Inclusion criteria

1. Age group between 18 to 60 years.
2. Both sexes.
3. Patients have signs and symptoms of Manyastambha, as mentioned in Samhita.
4. Patients from all socio-economic statuses.

Exclusion criteria

1. Nasya Anarha
2. Patients with congenital anomalies of the spine.
3. Patients with cerebral injury, cerebral hemorrhage and cerebral pathology.
4. Patients with fracture or dislocation of cervical vertebrae and intervertebral disc.
5. Patients of accidental cases.
6. Patients have an infective disease of the spine.

Study duration- In this study, Nasya treatment was given for 14 days, followed by seven days of rest. Then post follow up of treatment was done on the 21st day. The total duration of the study was 21 days.

OBSERVATIONS

Age: 30 patients taken for the study were between 18-60 years, in which maximum numbers of patients were 30% (9 patients) between 21-30 years and 30% (9 patients) between 31-40 years. 16.67% (5 patients) were between 41-50 years, 13.33% (4 patients) between 51-60 years and 10% (3 patients) between 18-20 years. The highest incidence of Manyastambha was reported in the age group of 21-30 years, and 31-40 years, i.e., these age group found busier in their life by Vishamasana, like tailoring, reading, clerks and they are also sitting under fan daily, in some people Diwaswapna causes Kapha, these causative factors cause Manyastambha. (Table 2)

Sex: In the present study, 15 patients (50%) were females, and 15 patients (50%) were males. (Table 3)

Religion: In this study maximum numbers of patients were Hindu; 96.67% (29 patients) and 3.33% (1 patient) was Muslim as the Hindu religion is predominantly formed in the area where the study was conducted. (Table 4)

Education: Maximum number of patients i.e., 50% (15 patients) were graduate, 16.67% (5 patients) in high school, 13.33% (4 patients) was uneducated, 10% (3 patients) primary, 10% (3 patients) were postgraduate. (Table 5) Here, many people are

found in adults because they take the Vatakara Aahara and Vihara. Busy life, hurry in life, so facing the Manyastambha.

Socio-Economical Status: Maximum number of patients belonged to lower middle class 40% (12 patients) followed by middle class 33.33% (10 patients) and upper-middle-class 26.64% (8 patients) each group. Incidentally, most of the patients selected were from the lower middle class, so for commenting, we need to study on a large sample. (Table 6)

Occupation: Maximum number of patients i.e., 43.33% (13 patients) were housewife followed by 13.33% (4 patients) were businessmen, 10% (3 patients) were teachers, 6.67% (2 patients) were clerk, 3.33% (1 patient) was student, and 23.33% (7 patients) belongs to another group. (Table 7)

Because of the more incidence of homemakers, people in business, and teachers as they sit or stand in unusual postures for long periods, their mechanical lifestyle continues below the fan, and long period's Vata vitiates and causes Manyastambha.

Dietary habits: In the present study, it was observed that 66.67% (20 patients) have the habit of vegetarian nutritional habits, and 33.33% (10 patients) belong to mixed dietary habits, i.e., vegetarian and non-vegetarian. (Table 8)

Prakruti: In the present study maximum patients 44% (13 patients) were of Vatakapha prakruti, Vatapitta 33% (10 patients), Pittavata 10% (3 patients), Kaphavata 7% (2 patients), Pittakapha and Kaphapitta each 3% (1 patient). (Table 9)

Agni: Maximum numbers of patients, i.e. 56.66% (17 patients), were having Vishamagni followed by 23.33% (7 patients) of mandagni and 20% (6 patients) of Teekshnagni. This shows Vata, responsible for the Vishamagni, plays a significant role in the manifestation of Manyastambha. (Table 10)

Manyashoola: Maximum numbers of patients, i.e., 96.66% (29 patients), were having Manyashoola and 03.33% (01 patient) no complaints of Manyashoola. (Table 11)

Manyastambha- In the present study, 30 patients (100%) had Manyastambha.

Figure 1: X-ray of CS showing an early spondylotic change in C3, C4

Table 1: Dashmool Kwath Ingredients

Common Name	Latin Name	Family	Parts Used	Ratio
Bilva	<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Root	1
Agnimantha	<i>Clerodendrum phlomidis</i> L.	Verbenaceae	Root	1
Shyonaka	<i>Oroxylum indicum</i> Vest.	Bignoniaceae	Root	1
Paatla	<i>Stereospermum suaveolens</i> DC.	Bignoniaceae	Root	1
Gambhari	<i>Gmelina arborea</i> L.	Verbenaceae	Root	1
Shalparni	<i>Desmodium giganteum</i> DC.	Fabaceae	Root	1
Prishniparni	<i>Uraria Picta</i> Desv.	Fabaceae	Root	1
Brihati	<i>Solanum anguivi</i> Lam.	Solanaceae	Root	1
Kantakari	<i>Solanum surattense</i> Burm. f.	Solanaceae	Root	1
Gokshura	<i>Tribulus terrestris</i> L.	Zygophyllaceae	Root	1

Table 2: Distribution of Patients According to Age

Age	Number of Patients	Percentage
18-20	03	10
21-30	09	30
31-40	09	30
41-50	05	16.67
51-60	04	13.33

Table 3: Distribution of Patients According to Sex

Sex	Number of Patients	Percentage
Male	15	50
Female	15	50

Table 4: Distribution of Patients According to Religion

Religion	Number of Patients	Percentage
Hindu	29	96.67
Muslim	01	3.33

Table 5: Distribution of Patients According to Education

Education	Number of Patients	Percentage
Uneducated	04	13.33
Primary School	03	10
High School	05	16.67
Graduate	15	50
Postgraduate	03	10

Table 6: Distribution of Patients According to Socio-Economical Class

Socio-Economical Class	Number of Patients	Percentage
Lower Middle Class	12	40
Middle Class	10	33.33
Upper Middle Class	08	26.64

Table 7: Distribution of Patients According to Occupation

Occupation	Number of Patients	Percentage
Student	01	3.33
Teacher	03	10
Clerk	02	6.67
Housewife	13	43.33
Businessmen	04	13.33
Others	07	23.33

Table 8: Distribution of Patients According to Dietary Habit

Dietary habit	Number of Patients	Percentage
Vegetarian	20	66.66
Mixed	10	33.33

Table 9: Distribution of Patients According to Prakruti

Prakruti	Number of Patients	Percentage
Vata Pitta	10	33
Vata Kapha	13	44
Pitta Vata	03	10
Pitta Kapha	01	3
Kapha Vata	02	7
Kapha Pitta	01	3

Table 10: Distribution of Patients According to Agni Pariksha

Agni Pariksha	Number of Patients	Percentage
Vishamagni	17	56.66
Teekshnagni	06	20
Mandagni	07	23.33

Table 11: Distribution of Patients of Manyashoola Based on Involvement of Manyashoola

Manyashoola	Number of Patients	Percentage
Present	29	96.66
Absent	01	3.33

Table 12: Results of Manyashoola (Clinical Symptoms) Before, After, and Post Follow up of Treatment

Many Shoola	Mean	SD	SEM	t	P	Remarks
BT	2.833	0.648	0.118	2.408	0.023	* S
AT	2.667	0.758	0.138		(<0.05)	
BT	2.833	0.648	0.118	3.247	0.003	** HS
PFU	2.567	0.898	0.164		(<0.001)	

BT: Before Treatment, AT: After Treatment, PFU: Post-Follow-Up

Table 13: Results of Manyastambha (Clinical Symptoms) Before, After, and Post Follow up of Treatment

Many Stambha	Mean	SD	SEM	T	P	Remarks
BT	2.60	0.621	0.113	2.693	0.012	* S
AT	2.40	0.724	0.132		(<0.005)	
BT	2.60	0.621	0.113	3.247	0.003	** HS
PFU	2.333	0.802	0.146		(<0.01)	

BT: Before Treatment, AT: After Treatment, PFU: Post-Follow-Up

Table 14: Results of Flexion (Clinical Symptoms) Before, After, and Post Follow up of Treatment

Flexion	Mean	SD	SEM	t	P	Remarks
BT	2.667	0.606	0.111	3.247	0.003	** HS
AT	2.400	0.675	0.123		(<0.01)	
BT	2.667	0.606	0.111	3.247	0.003	** HS
PFU	2.400	0.675	0.123		(<0.01)	

BT: Before Treatment, AT: After Treatment, PFU: Post-Follow-Up

Table 15: Results of Extension (Clinical Symptoms) Before, After, and Post Follow up of Treatment

Flexion	Mean	SD	SEM	t	P	Remarks
BT	2.533	0.571	0.104	2.112	0.043	* S
AT	2.400	0.675	0.123		(<0.05)	
BT	2.533	0.571	0.104	2.408	0.023	* S
PFU	2.367	0.669	0.122		(<0.05)	

BT: Before Treatment, AT: After Treatment, PFU: Post-Follow-Up

Table 16: Clinical Improvement (CI) after Treatment of Subjective Parameters

Laxanas	CI-III	CI-II	CI-I	C.S	C.D
Shoola	0.0%	0.0%	16.66%	83.33%	0.0%
Stambha	0.0%	0.0%	20.00%	80.00%	0.0%

Table 17: Clinical Improvement (CI) Post Follow up of Subjective Parameters

Laxanas	CI-III	CI-II	CI-I	C.S	C.D
Shoola	0.0%	3.33 %	20.00%	76.66%	0.0%
Stambha	0.0%	3.33 %	20.00%	76.66%	0.0%

Table 18: Clinical Improvement (CI) after Treatment of Objective Parameters

Laxanas	CI-III	CI-II	CI-I	C.S	C.D
Flexion	0.0%	0.0%	26.66%	73.33%	0.0%
Extension	0.0%	0.0%	13.33%	86.66%	0.0%

Table 19: Clinical Improvement (CI) Post Follow up of Objective Parameters

Laxanas	CI-III	CI-II	CI-I	C.S	C.D
Flexion	0.0%	0.0%	26.66%	73.33%	0.0%
Extension	0.0%	0.0%	16.66%	83.33%	0.0%

RESULTS AND DISCUSSION

The effects of Nasya were assessed on each cardinal symptom of the disease. These symptoms were evaluated in the based-on scoring pattern, given before, after, and post follow up of the treatment. These symptoms were assessed statistically in the group.

Manyashoola: After Nasya, significant changes were seen in Manyashoola, but highly effective changes were observed post follow up of treatment. The mean score of Manyashoola was 2.833 before treatment which was reduced significantly to 2.667 after treatment with a t value of 2.408. But after follow up the mean score remarkably reduced to 2.567, which was statistically highly significant with a t value of 3.247. The results showed no clinically excellent response, with 16.66% encouraging, 83.33% clinically stable were seen after treatment while post follow up of treatment showed 3.33%, 20%, 76.66% good, encouraging and stable response respectively. (Table 12)

Manyastambha: Significant changes were observed after treatment, but highly significant differences were observed post follow up of treatment. The mean score of Manyastambha was 2.60 before the treatment, which was reduced significantly to 2.40 after treatment with a t value of 2.693. But after follow up the mean score remarkably reduced to 2.333, which was statistically highly significant with a t value of 3.247. The results showed no clinically excellent and good response, with 20% encouraging, 80.00% clinically stable were seen after treatment while post follow up of treatment showed 3.33%, 20%, 76.66% good, encouraging and stable response respectively. (Table 13)

Range of movements measured with Goniometer

The flexion initial mean value of the Goniometer reading was 2.667, reduced to 2.400 after treatment with a t value of 3.247, which was statistically highly significant. The same result was obtained post follow up of treatment. (Table 14)

The initial mean value of the Goniometer reading of extension was 2.533, reduced to 2.400 with a t value of 2.112 after statistically significant treatment. The mean value before treatment was reduced to 2.367 in the post follow up of treatment with a t value of 2.408, which is also statistically significant. (Table 15)

Clinical Improvement (CI) After Treatment of Subjective Parameters- Manyashool, Mansyastambh

CI-III- None of the patients showed excellent responses during the study.

CI-II- None of the patients showed a good response during the study.

CI-I- 16.66% Shoola, 20.00% Stambha patients showed encouraging responses during the study.

C.S- 83.33% Shoola, 80.00% Stambha patients showed stable response during the study. (Table 16)

Clinical Improvement (CI) Post Follow Up of Treatment of Subjective Parameters- Manyashool, Mansyastambh

CI-III- None of the patients showed excellent responses during the study.

CI-II- 3.33% Shool, 3.33% Stambha patients showed good responses during the study.

CI-I- 20.00% (Shoola), 20.00% (Stambha) patients showed encouraging responses during the study.

C.S- 76.66% (Shoola), 76.66% (Stambha) patients showed stable responses during the study. (Table 17)

Clinical Improvement (CI) After Treatment of Objective Parameters-Flexion and Extension

CI-III- None of the patients showed excellent responses during the study.

CI-II- None of the patients showed a good response during the study.

CI-I- 26.66% Flexion, 13.33 % Extension patients showed encouraging responses during the study.

C.S- 73.33 % Flexion, 86.66 % Extension patients showed stable response during the study. (Table 18)

Clinical Improvement (CI) Post Follow Up of Objective Parameters

CI-III- None of the patients showed excellent responses during the study.

CI-II- None of the patients showed a good response during the study.

CI-I- 26.66% Flexion, 16.66 % Extension patients showed encouraging responses during the study.

C.S- 73.33 % Flexion, 83.33 % Extension patients showed stable response during the study. (Table 19)

Due to Nidana Sevana, Vata, and Kapha Dosha vitiates, involving Rasa, Mamsa and Vatahara Srotas resulted in Sanga and manifest Manyastambha. The study showed that Sthambha is Pratyatma Lakshana with Shoola or without Shoola. Both Manyastambha and Manyashoola showed significant results after treatment, and highly substantial results post follow up of treatment.

With the help of the goniometer bending grade on flexion showed highly significant both after treatment and post follow up. In contrast, extension showed considerable results after treatment and post follow up of treatment¹⁰.

CONCLUSION

In Manyastambha, the main etiological factors for disease development are Vata and Kapha Dosha. In the present study, Dashmool Kwath Nasya has been adopted to manage Manyastambha, focusing on alleviating Vata and Kapha. Dashmoola Kwatha is a well-known ayurvedic medicine having an anti-inflammatory, analgesic effect. The active ingredients of the administered medicines in the nasal mucosa procedures through nostrils enter the cranial venous through vessels. It also reaches other areas of the cranial cavity like the internal ears,

eyes, throat and vital parts etc. It helps the vitiated dosha and helps to remove the disease.

Dashmool Kwath ingredients (Brihat Panchmoola- Vata Kapha Shamaka and Laghu Panchmoola- Vata Pitta Shamaka) have such qualities that it enters into minute channels of shirah. All these have Ushna properties because of this Ushna Veerya. Even in Kaphavarana, it will remove the Avaran of Kapha by its Ushna veerya, Tridoshashamak.

Occupational, postural hazards and those using hard pillows are prone to Manyastambha, and the symptoms of Manyastambha and Cervical Spondylitis are almost similar. Dashmool kwath Nasya karma is having a prolonged action as it has highly significant results post follow up of treatment compared to after treatment.

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