

## A CLINICAL STUDY ON THE MANAGEMENT OF MANYAGRAHA WITH SPECIFIC REFERENCE TO CERVICAL SPONDYLOSIS BY NASYA WITH HERBO-MINERAL DRUG

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### ABSTRACT

Today's life is very hectic and stressful; to cope up with this competition people adapt a lifestyle which is unhealthy. Adaptation of change in lifestyle as well as posture of body that its consequences are resulted in the derangement of function or structure of *Dosh-Dushya*. If further changes are there, it ends in different forms of pain because manifestation of different disease. *Manyagraha* with special reference to cervical spondylosis is one of them. *Tikta Rasa* is responsible to increase *Vata* but *Panchtikta* is processed with *Grhita* is *Sneha* and *Guggul* which is *Vedana Sthapak* hence do not vitiate *Vata*. And *Nasya* is mentioned in the texts as a very effective treatment for all *Urdhvajatrugata Roga*. The group in which *Panchatiktagrhita Guggul* and *Anutaila Nasya* were given to patient was termed as Treated group. The group, in which Only *Anutaila Nasya* was given to patients, was termed as Control Group. During this study 60 patients of *Manyagraha* were equally divided into Trial and Control Group by lottery method and comparative study was done.

**Key word:** *Manyagraha, Panchatiktagrhita Guggul and Nasya.*

### INTRODUCTION

Now a day's life has become very stressful and fast competitive world around society has compelled to adopt a hectic life schedule. Adaptation of change in lifestyle as well as posture of body result that its consequences are resulted in the derangement of function or structure of *Dosh-Dushya*. If further changes are there, it ends in different forms of pain because manifestation of particulars different disease. *Manyagraha* with special reference to cervical spondylosis is one of them.

*Charaka* described the management of *As-thipradoshaja Vyadhi* in *Charaka Sutrasthan* in which *Tikta Rasa* was used<sup>1</sup>. *Tikta Rasa* itself is said to be *Vata* vitiating so that is beneficial in *Pachana* of *Meda Dhatu* due to its *Khara Guna* which is beneficial for development of *uttardhatu* that is *Asthi*.<sup>2</sup> *Panchtikta* is processed with *Grhita* which is *Sneha* and *Guggul* which is *Vataghna*<sup>3</sup> and more effective in nourishment of *Asthi Dhatu* and also *Meda Dhatu*. And *Nasya* is described for

*Urdhvajatrugata Vyadhi*.<sup>4</sup> Hence *Panchatiktagrhita Guggul*<sup>5</sup> and *Anutaila Nasya*<sup>6</sup> was given to the patient. The group in which *Panchatiktagrhita Guggul* and *Anutaila Nasya* were given to patients was termed as Treated group. Drug may be act by vascular path and neural path. In nasal cavity the sub mucosa is rich vascularised. Large surface of nasal cavity and relatively high blood flow promotes rapid absorption<sup>7</sup>. The delivery of drug from nose to central nervous system may occur via olfactory neuro epithelium and according to study this may involve Para cellular, trans cellular and/or neural transport<sup>8</sup>. The group, in which only *Anutaila Nasya* was given to patient, was termed as Control Group. During this study 60 patients of *Manyagraha* (cervical spondylosis) were equally divided into Trial and Control Group by lottery method. *Nasya* was given to the both group patient for 21 days as per Kala after local *Snehan Swedan* and *Panchatiktagrhita Guggul* was given to 500 mg in BD after meal along with lukewarm water orally.

#### **Aims and objectives:**

1. To compare the effect of Anutail Nasya in trial group with that of Panchatika Grut Guggul with Anutail Nasya in control group.
2. To evaluate the effective medicine on clinical feature of *Manyagraha*.
3. To evaluate the effect of *Nasya* eight drops twice in a day and *Panchatiktagrhita Guggul* 500mg twice in a day after meal in *Manyagraha*.

#### **Materials and Methods:**

1. The randomly selected Patients suffering from *Manyagraha* and attending the O.P.D. and I.P.D. were selected from Govt. Ayurved Hospital.
2. To select the size of sample for this study the standard criteria for sample

selection depends upon precision mean and standard deviation so as to ascertain the number of patients in the study.

3. 60 patients of *Manyagraha* were selected. These patients were divided into two groups randomly. The group one called as Trial Group comprised 30 patients, in which *Panchatiktagrhita Guggul* with *Nasya* was given for 21 days. While in another group called as Control Group also comprised 30 patients of *Manyagraha* to whom Only *Nasya* was given for 21 days. And follow up was at every week and whenever needed.
4. *Nasya* was given to patient as per procedure mentioned in Classical text.

**Criteria of Diagnosis:** The patients were diagnosed on the basis of Symptoms of cervical spondylosis, and Radiological criteria.

#### **Criteria for Inclusion of Patients:**

1. Corresponding to diagnostic standards of cervical spondylosis.
2. One or more neck pain, neck stiffness attack on average per month for least 3 month.
3. The result of antero-posterior and lateral radiograph corresponds to x-ray diagnosis of cervical spondylosis.
4. Age between 18-60 years.
5. Understanding and being willing to sign the inform consent form.

#### **Criteria for Exclusion of Patients:**

1. The patients who had fixed joints or having developed contractures are not included in the study.
2. The patients depending upon steroids and some analgesic drug for the relief also are excluded from study.

3. Patients having severe systemic diseases or condition along with Manyagraha etc.

**Table no.1**

**Table Showing Groups of Management in the Study**

	<b>Trial group</b>	<b>Control group</b>
<b>Drug</b>	Nasya with Panchatiktagrhita Guggul	Nasya
<b>Dose</b>	8 Drops+500 mg BD	8 Drops
<b>Duration</b>	21 days	21 days
<b>Sevan Kala</b>	After meal and Nasya as per Kala	As per Kala
<b>Route</b>	Oral and Nasa	Nasa
<b>Anupan</b>	Lukewarm water	--
<b>No of patients</b>	30	30
<b>Follow up study</b>	Every week and whenever needed	Every week and whenever needed

**Criteria of Assessment:** Patients were assessed on the basis of Neck Pain Disability index. This was the standard criteria for assessment of the study and whole study was carried out on these parameters.

**Section 1: Pain Intensity**

**Grade**

- I have no pain at the moment. (0)
- The pain is very mild at the moment. (1)
- The pain is moderate at the moment. (2)
- The pain is fairly severe at the moment.(3)
- The pain is fairly very severe at the moment. (4)

The pain is worst imaginable at the moment. (5)

Section 2: Personal Care (Washing, Dressing etc.)

Section 3: Lifting

Section 4: Reading

Section 5: Headache

Section 6: Concentration

Section 7 – Work

Section 8 – Driving

Section 9 – Sleeping

Section 10 – Recreation

**Observation and Result:**

**Table No. 2: Table Showing Effect of Therapy On General**

Symptoms Score of 60 Patients of Manyagraha

S.N.	Symptoms	Group	Symptoms score		% of Relief (Diff/BT)	
1	Pain intensity	Trail Group	115	4	111	96.37
		Control Group	115	24	91	79.17
2	Personal Care	Trail Group	110	8	102	92.78
		Control Group	112	32	80	71.42
3	Lifting	Trail Group	110	14	96	87.27
		Control Group	110	31	79	71.82
4	Reading	Trail Group	113	10	103	91.15
		Control Group	113	25	88	77.88
5	Headaches	Trail Group	117	12	105	89.74
		Control Group	118	18	100	84.75
6	Concentration	Trail Group	117	13	104	88.89
		Control Group	114	23	91	79.82
7	Work	Trail Group	112	27	85	75.89

		Control Group	120	31	89	74.17
8	Sleeping	Trail Group	111	13	98	88.29
		Control Group	111	13	98	88.29
9	Recreation	Trail Group	114	16	98	85.96
		Control Group	108	46	62	57.41
10	Total score	Trail Group	1019	117	902	88.52
		Control Group	1021	243	778	75.97

**Effect of Therapy on General Symptoms:**

It comprehended that more percentage of relief in the symptoms score of Trial Group than Control Group was observed in the symptoms like pain intensity, personal care, lifting, reading, headache, concentration, work, sleeping, recreation average percentage of relief in Treated Group was more than Control Group. The treat-

ment in Control Group exhibited more percentage of relief in the symptoms such as pain intensity, personal care and reading.

Table no.3 Table Showing Effect of Therapy On Symptoms of 60

Patients of Manyagraha By Wilcoxon-Ranked Singed Test

S. N.	Symp-toms	Grou ps	W	T +	T_	Me-dian	BT Mean± <u>SD</u>	AT Mean± <u>S</u> <u>D</u>	SD	Z	P
1	Pain In-tensity	TG	465	46	0.0	4	3.83±0.38	0.13±0.35	48.62	4.77	<0.0001
		CG	465	46	0.0	3	3.83±0.38	0.80±0.55	48.62	4.77	<0.0001
2	Personal Care	TG	465	46	0.0	3	3.83±0.38	0.133±0.34	48.62	4.77	<0.0001
		CG	465	46	0.0	3	3.73±0.45	1.06±0.45	48.62	4.77	<0.0001
3	Lifting	TG	465	46	0.0	3	3.67±0.48	0.467±0.51	48.62	4.77	<0.0001
		CG	465	46	0.0	3	3.67±0.48	1.03±0.32	48.62	4.77	<0.0001
4	Reading	TG	465	46	0.0	3	3.77±0.43	0.33±0.48	48.62	4.77	<0.0001
		CG	465	46	0.0	3	3.77±0.43	0.83±0.59	48.62	4.77	<0.0001
5	Head-ache	TG	465	46	0.0	4	3.90±0.30	0.40±0.49	48.62	4.77	<0.0001
		CG	465	46	0.0	3	3.93±0.64	0.600±0.498	48.62	4.77	<0.0001
6	Concen-	TG	465	46	0.0	4	3.90±0.31	0.433±0.50	48.62	4.77	<0.0001

	tration	CG	465	46	0.0	3	3.80±0.41	0.767±0.57	48.62	4.77	<0.0001
7	Work	TG	465	46	0.0	3	3.73±0.44	0.90±0.61	48.62	4.77	<0.0001
		CG	465	46	0.0	3	4.00±0.00	1.033±0.49	48.62	4.77	<0.0001
8	Sleeping	TG	465	46	0.0	3	3.70±0.47	0.433±0.50	48.62	4.77	<0.0001
		CG	465	46	0.0	3	3.70±0.46	0.433±0.50	48.62	4.77	<0.0001
9	Recreation	TG	465	46	0.0	3	3.80±0.40	0.533±0.50	48.62	4.77	<0.0001
		CG	435	43	0.0	2	3.60±0.49	1.53±0.62	48.62	4.77	<0.0001

### Effect of Therapy on Symptom of Manyagraha Score by Wilcoxon Ranked Sign Test:

All the symptoms mentioned in Table-3 were graded before and after the treatment, as described in this chapter under the heading of criteria of assessment. As these symptoms were subjective in nature and hence were graded to evaluate the effect. Therefore effect of therapy in the group was statistically evaluated by non-parametric test as the graded data do not follow the normal distribution. It is a pre-requisite of parametric test that data must be quantitative, must follow normal distribution and sample should be selected by random method. Therefore these data of the said group were analysed by using Wilcoxon Ranked Sign Test.

**Effect on Pain intensity:** The mean of ranks of all the patients before starting the treatment was  $3.83 \pm 0.38$  which after the treatment reduced to  $0.13 \pm 0.32$  in pain intensity. The sum of all signed ranks was 465, Z value was 4.77,  $P < 0.0001$  which was statistically very highly significant in Trial group. Control group sum of all signed ranks were 465, Z value 4.77,  $P < 0.0001$  which was also statistically very

highly significant. However the mean before starting the treatment was  $3.83 \pm 0.38$  which after a gap of treatment period reduced to  $0.80 \pm 0.55$ .

**Effect on Other Symptoms:** The same method as described in pain intensity and personal care was followed for evaluation of statistical analysis. The means of the ranks before starting the treatment with respect to other symptoms such as lifting, reading, headache, concentration, work, sleeping, recreation average have been presented in table. All these means of ranks of these symptoms were again evaluated after the treatment. All these data had been depicted in above table. The Z values were calculated and were compared with that of tabular Z values to know the efficacy in both the groups, as well as to know the level of efficacy. While going through table to review the ranked sign test, it was observed that there were highly significant results with respect to the symptoms such as lifting, reading, headache, concentration, work, sleeping, and recreation average in both the groups.

Table no.4 Table Showing Comparison between Two Groups of Manyagraha with

respect to Symptoms Score by Mann-Whitney Test

SN	Symptom	Mean $\pm$ SD of TG	Mean $\pm$ SD of CG	T1	T2	U'	U stat	Z	P
1	Pain Intensity	3.70 $\pm$ 0.54	3.03 $\pm$ 0.61	1163	667	698	202	3.659	<0.0001
2	Personal Care	3.40 $\pm$ 0.62	2.67 $\pm$ 0.61	1162	668	697	203	3.644	<0.0001
3	Lifting	3.20 $\pm$ 0.61	2.63 $\pm$ 0.56	1112	718.5	646.5	253	2.912	0.0008
4	Reading	3.43 $\pm$ 0.57	2.93 $\pm$ 0.87	1058	772	593	307	2.114	0.0210
5	Headaches	3.50 $\pm$ 0.57	3.33 $\pm$ 0.71	965	865	500	400	0.739	0.4240
6	Concentration	3.47 $\pm$ 0.63	3.03 $\pm$ 0.67	1069	761	604	296	2.276	0.0148
7	Work	2.83 $\pm$ 0.79	2.97 $\pm$ 0.49	883	947	418	482	0.465	0.5243
8	Sleeping	3.27 $\pm$ 0.74	3.27 $\pm$ 0.52	931	899	466	434	0.229	0.8271
9	Recreation	3.27 $\pm$ 0.74	2.07 $\pm$ 0.78	1229	601.5	763.5	136	4.634	<0.0001

**Comparison between Two Groups with Respect to Symptom Score by Mann-Whitney test:** To evaluate the better drug in comparison, Mann-Whitney test was applied in all the symptoms described in above table to compare the effect shown by *Nasya* and *Panchtiktagrhita Guggul* in respective groups. The symptoms such as Pain intensity, personal care, lifting, reading, headaches, concentration, work, sleeping and recreation exhibited significant effects at different levels of significance. It can be judged that one of the drugs in group is better than the other with respect to foresaid symptoms. The mean of difference of rank of Treated Group in symptoms such as pain intensity, personal care, and recreation was more than the mean of difference of rank of Control Group. For instance, the mean of difference in Treated Group for Pain intensity was 3.70 $\pm$ 0.54 and in case of Control Group it was 3.03 $\pm$ 0.61. Statistical analysis was further carried out by Mann-Whitney U test for the comparison of two independent quantitative data. T1 and T2 were 1163 and 667 respectively. U' and U stat were 698 and 202 respectively. Z was 3.659, P<0.0001. The result was very highly significant. In

Treated Group difference after treatment was more than the difference of Control Group. It is obvious that the Treated group exhibited better results than Control with respect to pain intensity. In the same manner the other symptoms such as personal care, recreation also had showed better results in Treated Group than Control. Though difference of mean of ranks in symptoms such as headache, working, sleeping was more in Treated Group if compared with Control Group, however when this increase was statistically tested by Mann-Whitney Test, the results were insignificant. And the symptoms such as lifting, reading and concentration showed that mean of difference of ranks in Treated Group was more than Control Group. This more value of ranks in Control was significant, if compared with that of Treated by statistical evaluation of Mann-Whitney test.

## DISCUSSION

In Panchatiktagrhita Gugul Tikta Rasa residing Khara Guna, in the formation of Asthi Dhatu, thus relieves its Kshaya. Vishada Guna helps the Tikta Rasa to act upon such deep situated Dhatu and its Dhatu Agni. To counter the Ruksha



Guna of Tikta Rasa from vitiating already vitiating Ruksha Guna of Vata, Sneha such as Ghrita is along with Tikta Rasa. Tikta Rasa are responsible to increase Vata but Panchtikta is processed with Grhita which Sneha and Guggul which is Vedana Sthapanhar. And Nasya is mentioned in the texts as a very effective treatment for all Urdhvajatrugata Roga. According to Charaka Nasa is the gate way of Shirah. The drug administered through nose as Nasya reaches the brain & eliminates only the morbid Doshas which are responsible for producing the disease. Drug may be act by vascular path and neural path. In nasal cavity the sub mucosa is rich vascularised. Large surface of nasal cavity and relatively high blood flow promotes rapid absorption. The delivery of drug from nose to central nervous system may occur via olfactory neuro epithelium and according to study this may involve Para cellular, trans cellular and/or neural transport. Effect of therapy on clinical parameters such as pain intensity, pain while personal care, lifting, reading, headache, concentration, work, sleeping, recreation was more in Trial Group than Control Group. Unpaired “t” test also give significant result. In terms of physical parameters, significant reduction is observed in right lateral angle in both the groups and unpaired “t” test also gave significant result. The total effect of the therapy showed that 66.67% patients of control group show markedly improvement while 33.33% patient having moderately improvement.

## CONCLUSION

Result of control group is more fruitful result than trail group in various sign and symptoms.

1. Effect of therapy on clinical parameters such as pain intensity, pain while personal care, lifting, reading, head-

ache, concentration, work, sleeping, recreation was more in Trial Group than Control Group.

2. Unpaired “t” test also give significant result. In terms of physical parameters, significant reduction is observed in right lateral angle in both the groups and unpaired “t” test also gave significant result.
3. On the basis of statistical analysis *Panchatiktaghrta Guggul* with *Nasya* is more effective than *Nasya*.

## REFERENCES

1. Charak Samhita Edited by Ravidatta Tripathi Sutrasthan chapter 28 verse no. 27. Chaukhamba publication. Reprint 2009 page no.431
2. Ashtang Hrudaya Samhita. Edited by Bhisagacharya Harisastari Paradakara Vaidya, Chapter 11 verse no. - 32. Chaukhamba Publication. Reprint 2005. page no.186.
3. Ashtang Hrudaya Samhita. Edited by Ganesh Krushna Garde, Chapter 20 verse no. -48-50. Chaukhamba Publication. Reprint 2011. page no.85.
4. Ashtang Hrudaya Samhita. Edited by Ganesh Krushna Garde, Chapter 20 verse no. -2. Chaukhamba Publication. Reprint 2011. page no.83.
5. Bhaishjya Ratnawali. Edited by Prof. Siddhi Nandan Mishra. Chapter 54 verse no. 233-236. Chaukhamba Publication. Reprint 2010 page no.904
6. Ashtang Hrudaya Samhita. Edited by Bhisagacharya Harisastari Paradakara Vaidya, Chapter 20 verse no. -38. Chaukhamba Publication. Reprint 2005. page no.293.
7. Y.W. chein, K.S.E. Su, and S.F. Chang. Nasal system drug delivery, Marcel Dekker, Inc, New York. 1989.

8. L. Iium. Is nose to brain transport of drug in man a reality? *J Pharm Pharmacol.*56:3-17.2004.

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