

Original Research

Role of Rasana Guggulu and Mahanimba (Melia azedarch) in Management of Gridhrasi (Sciatica)

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Abstract:

Rasana Guggulu comprises of Rasana and Guggulu having analgesic action and Mahanimba (Melia azedarch) specifically indicated in Gridhrasi were selected for this study and both were administered simultaneously for one month to the patients of Gridhrasi (sciatica). The results of this study showed that the therapy significantly reduced the area of distribution of pain as well as the severity of pain and tenderness. It significantly reduced the stiffness (Stambha) and restriction of movement (Graha) which was reflected in increase in degree of SLR test and reduction in walking time; thus causing significant increase in the movements of the affected lower limbs. Consideration of overall relief showed that the therapy provided complete remission to 8.3% patients, marked improvement to 33.3% patients and mild improvement to 50.0% but 8.3% patients remained unchanged.

Key Words: Gridhrasi, sciatica, Rasana Guggulu, Mahanimba, Melia azedarch

Introduction:

Rasana Guggulu is recommended for the treatment of Gridhrasi by Chakradatta, Gadani-graha, Bhavaprakash and Yogaratnaka which comprises of only two drugs viz. Rasana-4 parts and Shuddha Guggulu-5 parts and tablets were prepared with the help of ghee. Both Guggulu and Rasana are well known Ayurveda analgesics, so it was selected for this study as Gidhrasi is a pain dominating Vata Vaydhi.

Mhanimb (Melia azedarch) is specifically recommended for the treatment of Gridhrasi by Bhavaprakasha. Thinking it may be working as Vyadhi-Hara drug for Gridhrasi, therefore, this drug was also selected because as per contemporary knowledge sciatica (Gridhrasi) is caused by the pressing of the nerve routes by the lumbar vertebra.

Aims and Objects:

To evaluate the role of Rasana Guggulu and Mhanimb (Melia azedarch) Churna in the management of Gridhrasi (sciatica)

Materials and Methods:

The patients having the characteristic symptoms of Gridhrasi (sciatica) were selected irrespective of age, sex, religion, caste, etc from OPD of IPGT&RA, GAU Jamnagar hospital and further screened for confirming the diagnosis.

Criteria of Diagnosis:

Pain in distribution of sciatica nerve as well as mentioned in Ayurveda i.e. Kati (lumbar region), Prishtha (buttock), Uru (thigh), Janu (knee area), Jangha (leg) and Pada (foot) with positive SLR was the main criteria of the diagnosis. In doubtful cases X-ray was taken.

Criteria of Inclusion: The patients having chronicity for more than one month both the sexes irrespective of caste, religion etc.

Criteria of Exclusion: Such patients whose cause of disease was osteoarthritis, cervical spondylitis, tuberculosis, malignancy etc were excluded.

Drugs and Doses:

12 patients of Gridhrasi (sciatica) were treated in single group and were administered Rasana Guggulu in the dose of 2 gm three times a day with water. Simultaneously powder obtained from the Jata (stem shoot) of Mahanimba was also given in the dose of 2 gm three times a day with water.

Duration of the Treatment: One month

Assessment Criteria:

Distribution of Pain: The pain in sciatica patient is felt in one or more of the six regions viz. Kati (lumbar region), Prishtha (buttock), Uru (thigh), Janu (knee area), Jangha (leg) and Pada (foot). Pain present in each region was given score one and thus total score of each patient was recorded before and after the treatment.

Severity of Pain: No pain-0, mild pain-1, moderate pain-2 and severe pain-3 scores were assigned.

Graha Score: Restriction of the movement was assessed by the capacity of the patient for forward bending as follow: forward bending up to toe-0, up to midleg-1, up to knee-2 and up to mid thigh-3 scores were given.

Stambha (Stiffness): This symptom was assigned score on the basis of the duration of lasting the stiffness per day as follow:

No stiffness-0, stiffness lasting for one hour-1, stiffness lasting for two hours-2, stiffness lasting for two to four hours-3 and stiffness lasting for more than four hours-4 scores were given.

Complete Remission: 100% relief in signs and symptoms along with negative SLR was considered complete remission.

Marked Improvement: Improvement in signs and symptoms up to 50% along with marked improvement in SLR was taken as marked improvement.

Mild Improvement: Improvement in signs and symptoms less than was considered as mild improvement.

Unchanged: No improvement in signs and symptoms was mentioned as unchanged.

Results

In this study 12 patients of Gridhrasi (sciatica) were treated in single group with Rasana Guggulu and powder of Jata (shoots) of Mahanimba (Melia azedarch) for one month. The effects of the therapy on the chief complaints of the

patients is shown in Table-1, on associated symptoms in Table-2, on SLR Test in Table-3 and on vital data along with statistical analysis have been shown in Table-4. The overall effect of the therapy is presented in Table-5.

Table-1
Effect of Rasana Guggulu and Mahanimba (Melia azedarch) on Chief Complaints of Gridhrasi (Sciatica) Patients

Signs & Symptoms	Mean Score		% of change	SD (±)	SE (±) (±)	t	P
	BT	AT					
Distribution of pain	5.42	3.17	41.51	2.61	0.753	2.767	<0.05
Severity of pain	2.35	0.99	57.9	0.803	0.232	5.862	<0.001
Stiffness (Stambha)	2.17	1.08	50.23	0.289	0.083	13.05	<0.001
Restriction of movement (Graha)	1.75	0.92	47.4	0.718	0.207	4.026	<0.01
Tenderness	1.68	0.82	51.2	0.38	0.11	7.977	<0.001

Table-2
Effect of Rasana Guggulu and Mahanimba (Melia azedarch) on Associated Symptoms of Gridhrasi (Sciatica) Patients

Signs & Symptoms	Mean Score		% of change	SD (±)	SE (±) (±)	t	P
	BT	AT					
Tingling sensation (Toda)	2.0	0.75	62.5	0.754	0.218	5.734	<0.001
Fasciculation (Sphurana)	1.5	0.58	61.33	0.90	0.26	4.167	<0.01
Frequent pulsation (Muhu Spandana)	1.17	0.25	78.55	0.90	0.26	3.526	<0.01
Heaviness (Gaurava)	1.5	0.5	66.7	0.954	0.275	3.636	<0.01
Disliking for food (Arochaka)	1.5	0.58	61.3	0.793	0.229	4.003	<0.01
Drowsiness (Tandra)	1.5	0.5	66.0	0.853	0.246	4.065	<0.05

Table-3
Effect of Rasana Guggulu and Mahanimba (Melia azedarch) on Straight Leg Rise Test of Gridhrasi (Sciatica) Patients

Signs & Symptoms	Mean Score		% of change	SD (±)	SE (±) (±)	t	P
	BT	AT					
SLR Degree (Left leg 7 patients)	50.0	57.86	13.58	0.67	2.143	3.67	<0.05
SLR Degree (Right leg 11 patients)	56.36	67.27	16.22	13.3	4.2	2.6	>0.05
Average	53.18	62.56	15.0				<0.05

Table-4
Effect of Rasana Guggulu and Mahanimba (Melia azedarch) on Vital Data of Gridhrasi (Sciatica) Patients

Signs & Symptoms	Mean Score		% of change	SD (±)	SE (±) (±)	t	P
	BT	AT					
Pulse/M	72.25	74.58	3.12	3.473	1.003	3.26	<0.05
Weight in Kg	55.56	54.16	8.69	1.624	0.469	3.198	<0.01
Systolic blood pressure mm Hg	127.0	122.66	3.41	4.758	1.373	2.549	<0.05
Diastolic blood pressure mm Hg	78.66	76.50	2.74	2.329	0.672	4.216	<0.01
Walking time in seconds	29.0	24.07	17.0	1.71	0.49	3.06	<0.01

Table-5
Overall Effect of Rasana Guggulu and Mahanimba (Melia azedarch) on 12 Patients of Gridhrasi

Result	Number of patients	Percentage of patients
Complete remission	1	08.33
Markedly improved	4	33.33
Improved	6	50.00
Unchanged	1	8.33

Discussion

Simultaneous administration of Rasana Guggulu and Mahanimba (Melia azedarch) for one month provided significant relief in the symptoms of distribution of pain by 41.51%, severity of pain by 57.9%, in stiffness (Stambha) by 50.23%, in restriction of movement (Graha) by 47.4% and in tenderness by 51.2% (Table-1).

The therapy also provided significant relief in associate symptoms of tingling sensation (Toda) by 62.5%, in fasciculation (Sphurana) by 61.3, in frequent pulsation (Muhu Spandana) by 78.55, in heaviness (Gaurava) by 66.7, in disliking for food (Arochaka) by 61.3 and in drowsiness (Tandra) by 66.0% (Table-2).

It also increased the degrees of SLR of both the effected legs by average of 15.0%, indicating significant relief in the disease as well as movement of the lower limbs.

The therapy also significantly decreased the body weight of the patient by 8.69%, systolic blood pressure by 3.4%, diastolic blood pressure by 2.7% and walking time by 17.0% and increased the pulse rate by 3.1%.

Consideration of overall relief provided by the therapy showed that 8.3% patients got complete remission, 33.3% patients got marked improvement and 50.0% patients got

improvement while 8.33% patients remained unchanged (Table-5).

Conclusions

The one month therapy with simultaneously administration of Rasana Guggulu and Mahanimba (Melia azedarch) were simultaneously administered to the patients of Gridhrasi (sciatica) for one month.

The therapy significantly reduced the area of distribution of pain as well as the severity of pain and tenderness.

It significantly reduced the stiffness (Stambha) and restriction of movement (Graha) which was reflected in increase in degree of SLR test and reduction in walking time; thus causing significant increase in the movements of the affected lower limbs.

The therapy also provided significant relief in associated symptoms of tingling sensation (Toda), fasciculation (Sphurana), frequent pulsation (Muhu Spandana), heaviness (Gaurava), disliking for food (Arochaka) and in drowsiness.

The therapy also significantly decreased the body weight, systolic and diastolic blood pressure of the patients.

Consideration of overall relief showed that the therapy caused complete remission in 8.3%, marked improvement in 33.3%, and improvement in 50.0% but 8.33% patients remained unchanged.

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