



Research Article

A CLINICAL EVALUATION OF MATRA BASTI AND KATI BASTI WITH DHANWANTARAM TAILA IN THE MANAGEMENT OF GRIDHRASI

N. Haritha^{1*}, Rashmi. R², Nihil Gigi³, Binu.M.B⁴

¹PG Scholar, ²Professor and HOD, Dept. of Panchakarma, Ramakrishna Ayurvedic Medical College Hospital & Research Centre, Bengaluru, India.

³PG Scholar, ⁴Assistant Professor, Dept. of Rasashastra and Bhaishajya Kalpana, Ramakrishna Ayurvedic Medical College Hospital & Research Centre, Bengaluru, India.

ABSTRACT

Gridhrasi comes under 80 types of *Nanatmaja Vatavyadhi*. The cardinal signs and symptoms of *Gridhrasi* are *Ruk* (pain), *Toda* (pricking sensation), *Spandana* (twitching) in the *Sphik, Kati, Uru, Janu, Jangha* and *Pada* in order and *Sakthikshepa Nigraha* i.e., restricted lifting of the leg associated with *Gourava, Aruchi*. *Kati Basti* is widely being practiced throughout country as *Bahyaupakrama* which has both *Snehana* and *Swedana* effects. *Matra Basti* is *Snehana* procedure which does *Vata anulomana, Vatashamana*. **Objectives:** To evaluate the efficacy of *Matrabasti* and *Katibasti* with *Dhanvantaram Taila* in the management of *Gridhrasi*. **Materials and Methods:** Patients presenting with the classical features of *Gridhrasi* and between the age group of 16 to 50 years irrespective of sex were selected and allotted in Group A, B and C with 15 patients in each group. Group A was administered with *Matra basti* with *Dhanwantram Taila* and Group B with *Kati basti* with *Dhanwantram Taila* and Group C with both *Matra basti* and *Kati basti* with *Dhanwantram Taila* for 9 days. **Results:** In combined treatment of *Kati Basti* and *Matra Basti* in Group C there was tremendous response in relieving *Ruk* (73%), *Toda* (46%), *Spandana* (60%), *Supti* (80%), *Gourava* (73%), *Aruchi* (66%), *Sparshasahyata* (73.3%) SLR (60%). In Group A, patients subjected to *Matra Basti* was effective in relieving *Ruk* (26.7%), *Toda* (13.3%), *Spandana* (26.7%), *Supti* (66.7%), *Gourava* (46.7%), *Aruchi* (53.3%), *Sparshasahyata* (13.3%) SLR (6.7%). In Group B patients subjected to *Kati Basti* was effective in relieving *Ruk* (6.7%), *Toda* (0%), *Spandana* (0%), *Supti* (40%), *Gourava* (20%), *Aruchi* (0%), *Sparshasahyata* (20%) SLR (0%). **Conclusion:** On the basis of the results of this study, it can be clearly concluded that combined treatment of *Matrabasti* and *Kati basti* with *Dhanwantaram taila* provided significant relief in the signs and symptoms of *Gridhrasi* than individually performed *Matra basti* and *Kati basti* with *Dhanwantaram taila*.

KEYWORDS: *Matra Basti, Kati Basti, Gridhrasi, Sciatica, Dhanwantaram Taila.*

INTRODUCTION

In the present era, competition or race for everything made humans more susceptible to many Muscular skeletal diseases. The prime factors that are responsible for the decline of health are irregular food habits, swift jerky movements, stress, suppression of natural urges, lack of proper sleep and relaxation. In this scenario especially *Sciatica*, low back pain incidences are increasing day by day.

Sciatica is a disease with neurological symptoms pertaining to sciatic nerve. The first attack is often sudden in onset and occurs while lifting stooping, though sometimes pain in slight at first but increase over the next few hours the patient may be fixed, bent and has backache. Sometimes *sciatica* follows soon after and made worse by straining. Usually these symptoms subside in a few days or week. Low back pain is more common, second only to

the common cold. About 50% of working adult experiences a back injury each year and the incidence of *Sciatica* ranges from 11% - 40%.

With all the symptomatology of *Sciatica* comes under the purview of *Gridhrasi*. *Gridhrasi*, an entity enumerated by *Shulapradhana vyadhi* and is one among the 80 types of *Nanatmajavata vyadhis*^[1]. According to Acharya charaka, *Stamba, Ruk, Toda Spandana, Aruci, Tandra* and *Gourava* are the symptoms^[2]. According to Acharya Charaka, *Gridhrasi* is caused predominantly due to the vitiation of *Vata* or *Vata-Kapha*^[3]. *Gridhrasi* is pathological entity in which pain starts from the buttocks, waist or back and radiates gradually towards the thigh, knee, leg and foot. If there is stiffness pain, pins and needles restricted mobility and frequent catching sensation it is due to *Vata* on the other hand if drowsiness

heaviness and anorexia are present in addition it is due to *Vayu* and *Kapha*^[4].

Despite of technological and pharmacological advances, the management of sciatica is still a medical problem, where no permanent medical treatment is available, except some palliative measures, were again chances of reoccurrence are high.

Ayurvedic approach towards the disease is holistic. Numerous therapeutic modalities have been advocated by our *Acharyas* in the management of each and every disease.

Management of *Gridhrasi* comes under the treatment protocol of *Vata Vyadhi Chikitsa* where in *Snehana*, *Swedana*, *Basti chikitsa* make a major part^[5-7].

Basti therapy is considered as *Chikistsaardha* among all therapies. *Matrabasti* is a type of a *Sneha basti* which can be given in anytime, in any season and to anybody. It cures *Vataja* diseases. Moreover, it can be administered easily and without any restriction in food and activities.

Kati basti is a *Bahyaupakrama* which has both *Snehana* and *Swedana* effects, in which comfortably warm oil is kept over the *Kati* region for a certain period of time. And both, *Matrabasti* and *Kati basti* can be used as an OPD level procedure.

Dhanwantram taila is indicated in *Sarvavatavikarajith*, *Sootika*, *Bala*, *Marmasthirogas*, *Jwara*, *Gulma*, *Unmada*, *Mutraghata*, *Antravidhi*, *Yoniroga*, and *Kshaya*.

Hence the present study has been taken to compare the efficacy of *Matrabasti* and *Katibasti* with *Dhanwantaram taila* in the management of *Gridhrasi*. A clinical study was under taken where in 45 patients randomly allocated into 3 groups with 15 patients each. Group A patients were subjected to *Matrabasti*, Group B patients were subjected to *Kati Basti*, and Group C patients were subjected to *Kati Basti* and *Matra Basti* both. Overall response was better in Group C due to combined action of *Matrabasti* and *Kati Basti*.

MATERIALS AND METHODS

AIMS AND OBJECTIVES

1) To evaluate the efficacy of *Matrabasti* with *Dhanvantaram Taila* in the management of *Gridhrasi*.

Intervention

2) To evaluate the efficacy of *Kati basti* with *Dhanvantaram Taila* in the management of *Gridhrasi*.

3) To evaluate the efficacy of *Matra basti* and *Kati Basti* with *Dhanvantaram Taila* in the management of *Gridhrasi*.

Source of Data: 45 patients with features of *Gridhrasi*, were selected randomly for the study from the OPD and IPD of RAMC, H and RC, Bangalore.

Source of Drug: Genuine Raw drugs are procured from market. *Dhanwantaram taila* was prepared in *Baishajyakalpana* Dept of RAMC, Bengaluru.

Method of Collection of Data

- Patients suffering from classical signs and symptoms of *Gridhrasi*.
- 45 patients of either sex are randomly selected and assigned into three groups each comprising of 15 patients.
- A case proforma was specially designed and duly filled with all points of history taking, physical signs, and lab investigations.
- The parameters of signs and symptoms were scored as mentioned in the proforma.

Inclusion Criteria

1. Patients with clinical signs and symptoms of *Gridhrasi* and *Sciatica* like *Spandana*, *Aruchi*, *Gourava*, *Supti*, *Sparshaasayatha*
2. Patients of age limits between 16 to 50 years, irrespective of sex and socio-economic status
3. Patients having tenderness along the course of the Sciatic nerve

Exclusion Criteria

1. Patients with other systemic diseases like Diabetes mellitus, Tuberculosis
2. Traumatic lesion in lumbo-sacral region. Infective, Neoplastic conditions of Spine
3. Hip joint arthritis
4. Pelvis pathology
5. Pregnancy

Study design

A comparative clinical study with pre and post-test design was conducted on 45 patients with *Lakshanas* of *Gridhrasi*.

Table 1: Study Design

Group	Procedure	Drug	Days/ Sittings	Dose
A	<i>Matra Basti</i>	<i>Dhanwantaram taila</i>	9	75ml
B	<i>Kati Basti</i>	<i>Dhanwantaram taila</i>	9	100ml
C	<i>Matra Basti</i> and <i>Kati Basti</i>	<i>Dhanwantaram taila</i>	9	75ml and 100ml

45 Patients with *Lakshanas* of *Gridhrasi* were selected randomly and divided into three groups as Group-A, Group-B and Group-C.

Group-A: Patients will be subjected to *Matrabasti* with *Dhanwantaram taila* 75ml for 9 consecutive days.

Group-B: Patients will be subjected to *Katibasti* with *Dhanwantaram taila* 100ml (Duration 40 min) for 9 consecutive days.

Group-C: Patients will be subjected to *Matrabasti* and *Katibasti* with *Dhanwantaram taila* for 9 consecutive days.

Follow Up

Follow up was done after completion of *Viramakala* on 18th day.

Assessment Criteria

The assessment will be done on the basis of following subjective and objective parameters.

Subjective Parameters

1. *Ruk*
2. *Toda*

Study design: An observational clinical study.

3. *Spandana*
4. *Supti*
5. *Sparshaasahyata*
6. *Gourava*
7. *Aruchi*

Ethical Consideration

Ethical clearance was obtained from the institutional ethical committee of Ramakrishna Ayurvedic Medical College and Hospital, Yelahanka, Bengalur.

OBSERVATION AND RESULTS

The study was conducted to evaluate the efficacy of *Matrabasti* and *Katibasti* with *Dhanwantaram taila* in the management of *Gridhrasi*. A clinical study was under taken where in 45 patients randomly allocated into 3 groups with 15 patients each. Group A patients were subjected to *Matrabasti*, Group B patients were subjected to *Kati Basti*, and Group C patients were subjected to *Kati Basti* and *Matra Basti* both.

Table 2: Age distribution of patients studied

Age in years	Group A	Group B	Group C	Total
<30	1 (6.7%)	0 (0%)	1 (6.7%)	2 (4.4%)
30-40	4 (26.7%)	5 (33.3%)	4 (26.7%)	13 (28.9%)
41-50	6 (40%)	6 (40%)	5 (33.3%)	17 (37.8%)
51-60	4 (26.7%)	4 (26.7%)	5 (33.3%)	13 (28.9%)
Total	15 (100%)	15 (100%)	15 (100%)	45 (100%)
Mean ± SD	44.27±9.68	44.47±7.81	45.00±8.82	44.58±8.61

Samples are age matched with P=0.973, ANOVA test

In Group A, 1 (6.7%) were under the age group of 21-30 years, 4 (26.7%) were under the age group of 30- 40 years, 6 (40%) were under the age group of 41- 50 years and 4 (26.7%) were under the age group of 51- 60 years age group.

In Group B, 0 (0%) were under the age group of 21-30 years, 5 (33.3%) were under the age group of 30- 40 years, 6 (40%) were under the age group of 41- 50 years and 4 (26.7%) were under the age group of 51- 60 years age group. In Group C, 1 (6.7%) were under the age group of 21-30 years, 4 (26.7%) were under the age group of 30- 40 years, 5 (33.3%) were under the age group of 41- 50 years and 5 (33.3%) were under the age group of 51- 60 years age group.

Table 3: Gender distribution of patients studied

Gender	Group A	Group B	Group C	Total
Female	8 (53.3%)	6 (40%)	5 (33.3%)	19 (42.2%)
Male	7 (46.7%)	9 (60%)	10 (66.7%)	26 (57.8%)
Total	15 (100%)	15 (100%)	15 (100%)	45 (100%)

Samples are gender matched with P=0.529, Chi-Square test

Sex- In Group A, number of male patients- 8 (53.3%) and females 7 (46.7%). In Group B, number of male patients -6 (40%) and females 9 (60%). In Group C, number of male patients- 5 (33.3%) and females 10 (66.7%).

Table 4: Education distribution in three groups of patients studied

Education	Group A	Group B	Group C	Total
Graduate	7 (46.7%)	7 (46.7%)	7 (46.7%)	21 (46.7%)
Post Graduate	1 (6.7%)	1 (6.7%)	1 (6.7%)	3 (6.7%)
R & W	7 (46.7%)	7 (46.7%)	7 (46.7%)	21 (46.7%)
Total	15 (100%)	15 (100%)	15 (100%)	45 (100%)

P=1.000, Not Significant, Fisher Exact Test

In Group A, graduate patients were 7 (46.7%), patients who could read and write were 7 (46%), post graduates 1 (6.7%). In group B, graduate patients were 7 (46.7%), patients who could read and write were 7 (46%), post graduates 1 (6.7%). In group C, graduate patients were 7 (46.7%), patients who could read and write were 7 (46%), post graduates 1 (6.7%)

Table 5: Occupation distribution in three groups of patients studied

Occupation	Group A	Group B	Group C	Total
Field worker	2 (13.3%)	1 (6.7%)	2 (13.3%)	5 (11.1%)
Physical Labour	4 (26.7%)	2 (13.3%)	3 (20%)	9 (20%)
Sedentary	9 (60%)	12 (80%)	10 (66.7%)	31 (68.9%)
Total	15 (100%)	15 (100%)	15 (100%)	45 (100%)

P=0.829, Not Significant, Fisher Exact Test

In the present study, in Group A, patients who did field work 2 (13.3%), physical labour 4 (26.7%), sedentary 9 (60%). In Group B, patients who did field work are 1 (6.7%), physical labour 2 (13.3%), sedentary 12 (80%). In Group C, patients who did field work are 2 (13.3%), physical labour are 3 (20%), sedentary 10 (66.7%).

Table 6: Socio Economic Status- distribution in three groups of patients studied

Socio Economic Status	Group A	Group B	Group C	Total
Lower middle	6 (40%)	5 (33.3%)	7 (46.7%)	18 (40%)
Poor	2 (13.3%)	2 (13.3%)	1 (6.7%)	5 (11.1%)
Rich	4 (26.7%)	1 (6.7%)	2 (13.3%)	7 (15.6%)
Upper middle	3 (20%)	7 (46.7%)	5 (33.3%)	15 (33.3%)
Total	15 (100%)	15 (100%)	15 (100%)	45 (100%)

P=0.665, Not Significant, Fisher Exact Test

In Group A, socio economic status, lower middle class patients were 6 (40%), poor patients were 2 (13.3%), rich 4 (26.7%), upper middle class 3 (20%). In Group B, socio economic status, lower middle class patients were 5 (33.3%), poor patients were 2 (13.3%), rich 1 (6.7%), upper middle class 7 (46.7%). In Group C, socio economic status, lower middle class patients were 7 (46.7%), poor patients were 1 (6.7%), rich 2 (13.3%), upper middle class 5 (33.3%).

Table 7: Diet- distribution in three groups of patients studied

Diet	Group A	Group B	Group C	Total
Mixed	15 (100%)	12 (80%)	12 (80%)	39 (86.7%)
Veg	0 (0%)	3 (20%)	3 (20%)	6 (13.3%)
Total	15 (100%)	15 (100%)	15 (100%)	45 (100%)

P=0.217, Not Significant, Fisher Exact Test

Diet of Patients- In Group A, number of patients who were vegetarians were 0 (0%) and who took mixed diet were 15 (100%). In Group B, number of patients who were vegetarians were 3 (20%) and who took mixed diet were 12 (80%). In Group C, number of patients who were vegetarians were 3 (20%) and who took mixed diet were 12 (80%).

Table 8: Toda- distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

<i>Toda</i>	Before Treatment	After 9 th sitting	After 18 th day	% difference
Group A (n=15)				
• No pricking sensation	0 (0%)	0 (0%)	2 (13.3%)	13.3%
• Occasional	0 (0%)	3 (20%)	9 (60%)	60.0%
• Mild	0 (0%)	7 (46.7%)	4 (26.7%)	26.7%
• Moderate	11 (73.3%)	5 (33.3%)	0 (0%)	-73.3%
• Severe	4 (26.7%)	0 (0%)	0 (0%)	-26.7%
Group B (n=15)				
• No pricking sensation	0 (0%)	0 (0%)	0 (0%)	0.0%
• Occasional	0 (0%)	0 (0%)	8 (53.3%)	53.3%
• Mild	4 (26.7%)	8 (53.3%)	7 (46.7%)	20.0%
• Moderate	5 (33.3%)	7 (46.7%)	0 (0%)	-33.3%
• Severe	6 (40%)	0 (0%)	0 (0%)	-40.0%
Group C (n=15)				
• No pricking sensation	0 (0%)	0 (0%)	7 (46.7%)	46.7%
• Occasional	0 (0%)	9 (60%)	8 (53.3%)	53.3%
• Mild	6 (40%)	6 (40%)	0 (0%)	-40.0%
• Moderate	3 (20%)	0 (0%)	0 (0%)	-20.0%
• Severe	6 (40%)	0 (0%)	0 (0%)	-40.0%
P value	0.015*	<0.001**	0.002**	-

Before treatment BT T in Group A, 4 (26.7%) patients presented with grade 4 *Toda*, 11 (73.3%) patients presented with grade 3 *Toda*, 0 (0%) patients presented with grade 2 *Toda*, 0 (0%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Toda*. *Toda* T1 (after 9th sitting of *Matra Basti*) in Group A, 0 (0%) patients presented with grade 4 *Toda*, 5 (33.3%) patients presented with grade 3 *Toda*, 7 (46.7%) patients presented with grade 2 *Toda*, 3 (20%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Toda*. *Toda* T2 (after 18 days) in Group A, 0 (0%) patients presented with grade 4 *Toda*, 0 (0%) patients presented with grade 3 *Toda*, 4 (26.7%) patients presented with grade 2 *Toda*, 9 (60%) patients presented with grade 1 *Toda*, 2 (13.3%) patients presented with grade 0 *Toda*. Before treatment BT T in Group B, 6 (40%) patients presented with grade 4 *Toda*, 5 (33.3%) patients presented with grade 3 *Toda*, 4 (26.7%) patients presented with grade 2 *Toda*, 0 (0%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Toda*. *Toda* T1 (after 9th sitting of *Kati Basti*) in Group B, 0 (0%) patients presented with grade 4 *Toda*, 7 (46.7%) patients presented with grade 3 *Toda*, 8 (53.3%) patients presented with grade 2 *Toda*, 0 (0%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Toda*. *Toda* T2 (after 18 days) in Group B, 0 (0%) patients presented with grade 4 *Toda*, 0 (0%) patients presented with grade 3 *Toda*, 7 (46.7%) patients presented with grade 2 *Toda*, 8 (53.3%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Toda*. Before treatment BT T in Group C, 6 (40%) patients presented with grade 4 *Toda*, 3 (20%) patients presented with grade 3 *Toda*, 6 (40%) patients presented with grade 2 *Toda*, 0 (0%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Toda*. *Toda* T1 (after 9th sitting of *Kati basti* and *Matra Basti*) in Group C, 0 (0%) patients presented with grade 4 *Toda*, 0 (0%) patients presented with grade 3 *Toda*, 6 (40%) patients presented with grade 2 *Toda*, 9 (60%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Toda*. *Toda* T2 (after 18 days) in Group C, 0 (0%) patients presented with grade 4 *Toda*, 0 (0%) patients presented with grade 3 *Toda*, 0 (0%) patients presented with grade 2 *Toda*, 8 (53.3%) patients presented with grade 1 *Toda*, 7 (46.7%) patients presented with grade 0 *Toda*.

Table 9: Ruk (Pain)- Distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

Ruk (Pain)	Before Treatment	After 9th sitting	After 18th day	% difference
Group A (n=15)				
• No pain	0 (0%)	0 (0%)	4 (26.7%)	26.7%
• Trivial pain	0 (0%)	6 (40%)	11 (73.3%)	73.3%
• Mild pain	0 (0%)	9 (60%)	0 (0%)	0.0%
• Moderate pain	11 (73.3%)	0 (0%)	0 (0%)	-73.3%
• Severe pain	4 (26.7%)	0 (0%)	0 (0%)	-26.7%
Group B (n=15)				
• No pain	0 (0%)	0 (0%)	1 (6.7%)	6.7%
• Trivial pain	0 (0%)	1 (6.7%)	8 (53.3%)	53.3%
• Mild pain	5 (33.3%)	10 (66.7%)	5 (33.3%)	0.0%
• Moderate pain	6 (40%)	4 (26.7%)	1 (6.7%)	-33.3%
• Severe pain	4 (26.7%)	0 (0%)	0 (0%)	-26.7%
Group C (n=15)				
• No pain	0 (0%)	0 (0%)	11 (73.3%)	73.3%
• Trivial pain	1 (6.7%)	10 (66.7%)	4 (26.7%)	20.0%
• Mild pain	5 (33.3%)	5 (33.3%)	0 (0%)	-33.3%
• Moderate pain	5 (33.3%)	0 (0%)	0 (0%)	-33.3%
• Severe pain	4 (26.7%)	0 (0%)	0 (0%)	-26.7%
P value	0.067+	0.002**	<0.001**	-

Before treatment BT R RUK in Group A, 4 (26.7%) patients presented with grade 4 Ruk, 11 (73.3%) patients presented with grade 3 Ruk, 0 (0%) patients presented with grade 2 Ruk, 0 (0%) patients presented with grade 1 Ruk, 0 (0%) patients presented with grade 0 Ruk. Ruk R1 (after 9th sitting of *Matra Basti*) in Group A, 0 (0%) patients presented with grade 4 Ruk, 0 (0%) patients presented with grade 3 Ruk, 9 (60%) patients presented with grade 2 Ruk, 6 (40%) patients presented with grade 1 Ruk, 0 (0%) patients presented with grade 0 Ruk. Ruk R2 (after 18 days) in Group A, 0 (0%) patients presented with grade 4 Ruk, 0 (0%) patients presented with grade 3 Ruk, 0 (26.7%) patients presented with grade 2 Ruk, 11 (73.3%) patients presented with grade 1 Ruk, 4 (26.7%) patients presented with grade 0 Ruk. Before treatment BT R Ruk in Group B, 4 (26.7%) patients presented with grade 4 Ruk, 6 (40%) patients presented with grade 3 Ruk, 5 (33.3%) patients presented with grade 2 Ruk, 0 (0%) patients presented with grade 1 Ruk, 0 (0%) patients presented with grade 0 Ruk. Ruk R1 (after 9th sitting of *Kati Basti*) in Group B, 0 (0%) patients presented with grade 4 Ruk, 4 (26.7%) patients presented with grade 3 Ruk, 10 (66.7%) patients presented with grade 2 Ruk, 01 (6.7%) patients presented with grade 1 Ruk, 0 (0%) patients presented with grade 0 Ruk. Ruk R2 (after 18 days) in Group B, 0 (0%) patients presented with grade 4 Ruk, 1 (6.7%) patients presented with grade 3 Ruk, 5 (33.3%) patients presented with grade 2 Ruk, 8 (53.3%) patients presented with grade 1 Ruk, 1 (6.7%) patients presented with grade 0 Ruk. Before treatment BT R Ruk in Group C, 4 (26.7%) patients presented with grade 4 Ruk, 5 (33.3%) patients presented with grade 3 Ruk, 5 (33.3%) patients presented with grade 2 Ruk, 1 (6.7%) patients presented with grade 1 Ruk, 0 (0%) patients presented with grade 0 Ruk. Ruk R1 (after 9th sitting of *Kati Basti* and *Matra Basti*) in Group C, 0 (0%) patients presented with grade 4 Ruk, 0 (0%) patients presented with grade 3 Ruk, 5 (33.3%) patients presented with grade 2 Ruk, 10 (66.7%) patients presented with grade 1 Ruk, 0 (0%) patients presented with grade 0 Ruk. Ruk R2 (after 18 days) in Group C, 0 (0%) patients presented with grade 4 Ruk, 0 (0%) patients presented with grade 3 Ruk, 0 (0%) patients presented with grade 2 Ruk, 4 (26.7%) patients presented with grade 1 Ruk, 11 (73.3%) patients presented with grade 0 Ruk.

Table 10: Supti (Numbness)- Distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

Supti (Numbness)	Before Treatment	After 9th sitting	After 18th day	% difference
Group A (n=15)				
• Absent	2 (13.3%)	7 (46.7%)	12 (80%)	66.7%
• Present	13 (86.7%)	8 (53.3%)	3 (20%)	-66.7%
Group B (n=15)				
• Absent	6 (40%)	9 (60%)	12 (80%)	40.0%
• Present	9 (60%)	6 (40%)	3 (20%)	-40.0%
Group C (n=15)				
• Absent	1 (6.7%)	10 (66.7%)	13 (86.7%)	80.0%
• Present	14 (93.3%)	5 (33.3%)	2 (13.3%)	-80.0%
P value	0.107	0.529	1.000	-

In Group A before treatment, BT S *Supti* was present in 13 (86.7%) patients, and absent in 2 (13.3%). After 9th sitting of *Matra Basti* Group A i.e., S1, 8 (53.3%) patients presented *Supti* and in remaining 7 (46.7%) patients *Supti* was absent.

After 18th Day Group A i.e., S2, 3 (20%) patients presented *Supti* and in remaining 12 (80%) patients *Supti* was absent.

In Group B, before treatment, BT S *Supti* was present in 9 (60%) patients, and absent in 6 (40%).

After 9th sitting of *Kati Basti* Group B i.e. S1, 6 (40%) patients presented *Supti* and in remaining 9 (60%) patients *Supti* was absent.

After 18th Day Group B i.e., S2, 3 (20%) patients presented *Supti* and in remaining 12 (80%) patients *Supti* was absent.

In Group C before treatment, BT S *Supti* was present in 14 (93.3%) patients, and absent in 1 (6.7%).

After 9th sitting of *Kati Basti* and *Matra Basti* Group C i.e. S1, 5 (33.3%) patients presented *Supti* and in remaining 10 (66.7%) patients *Supti* was absent.

After 18th Day Group C i.e., S2, 2 (13.3%) patients presented *Supti* and in remaining 13 (86.7%) patients *Supti* was absent.

Table 11: Sparshasahyata (Tenderness) - Distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

Sparshasahyata (Tenderness)	Before Treatment	After sitting 9th	After day 18th	% difference
Group A (n=15)				
• No Tenderness	0 (0%)	1 (6.7%)	2 (13.3%)	13.3%
• Deep Tenderness	6 (40%)	9 (60%)	13 (86.7%)	46.7%
• Tenderness with fine touch	9 (60%)	5 (33.3%)	0 (0%)	-60.0%
Group B (n=15)				
• No Tenderness	0 (0%)	1 (6.7%)	3 (20%)	20.0%
• Deep Tenderness	7 (46.7%)	11 (73.3%)	12 (80%)	33.3%
• Tenderness with fine touch	8 (53.3%)	3 (20%)	0 (0%)	-53.3%
Group C (n=15)				
• No Tenderness	0 (0%)	4 (26.7%)	11 (73.3%)	73.3%
• Deep Tenderness	4 (26.7%)	11 (73.3%)	4 (26.7%)	0.0%
• Tenderness with fine touch	11 (73.3%)	0 (0%)	0 (0%)	-73.3%
P value	0.638	0.094+	0.002**	-

Before treatment, in Group A 9 (60%) patients presented with grade 2 *Sparshasahyatha*, 6 (40%) patients presented with grade 1 *Sparshasahyatha*, 0 (0%) patients presented with grade 0 *Sparshasahyatha*.

Sparshasahyatha Sh1 (after 9 sittings of *Matra Basti*) in Group A, 5 (33.3%) patients presented with grade 2 *Sparshasahyatha*, 9 (60%) patients presented with grade 1 *Sparshasahyatha*, 1 (6.7%) patients presented with grade 0 *Sparshasahyatha*.

Sparshasahyatha Sh2 (after 18days) in Group A 0 (0%) patients presented with grade 2 *Sparshasahyatha*, 13 (86.7%) patients presented with grade 1 *Sparshasahyatha*, 2 (13.3%) patients presented with grade 0 *Sparshasahyatha*.

Before treatment, in Group B 8 (53.3%) patients presented with grade 2 *Sparshasahyatha*, 7 (46.7%) patients presented with grade 1 *Sparshasahyatha*, 0 (0%) patients presented with grade 0 *Sparshasahyatha*.

Sparshasahyatha Sh1 (after 9sittings of *Kati Basti*) in Group B, 3 (20%) patients presented with grade 2 *Sparshasahyatha*, 11 (73.3%) patients presented with grade 1 *Sparshasahyatha*, 1 (6.7%) patients presented with grade 0 *Sparshasahyatha*.

Sparshasahyatha Sh2 (after 18days) in Group B 0 (0%) patients presented with grade 2 *Sparshasahyatha*, 12 (80%) patients presented with grade 1 *Sparshasahyatha*, 3 (20%) patients presented with grade 0 *Sparshasahyatha*.

Before treatment, in Group C 11 (73.3%) patients presented with grade 2 *Sparshasahyatha*, 4 (26.7%) patients presented with grade 1 *Sparshasahyatha*, 0 (0%) patients presented with grade 0 *Sparshasahyatha*.

Sparshasahyatha Sh1 (after 9sittings of *Kati basti* and *Matra Basti*) in Group C, 0 (0%) patients presented with grade 2 *Sparshasahyatha*, 11 (73.3%) patients presented with grade 1 *Sparshasahyatha*, 4 (26.7%) patients presented with grade 0 *Sparshasahyatha*.

Sparshasahyatha Sh2 (after 18days) in Group C 0 (0%) patients presented with grade 2 *Sparshasahyatha*, 4 (26.7%) patients presented with grade 1 *Sparshasahyatha*, 11 (73.3%) patients presented with grade 0 *Sparshasahyatha*.

Table 12: Spandana (Fasciculation) - Distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

Spandana (Fasciculation)	Before Treatment	After 9th sitting	After 18th day	% difference
Group A (n=15)				
• No Involuntary Movement	0 (0%)	0 (0%)	4 (26.7%)	26.7%
• Sometimes for 5-10 mins	0 (0%)	6 (40%)	7 (46.7%)	46.7%
• Daily for 10-30 mins	0 (0%)	6 (40%)	4 (26.7%)	26.7%
• Daily for 30-60 mins	11 (73.3%)	3 (20%)	0 (0%)	-73.3%
• Daily more than 1 hour	4 (26.7%)	0 (0%)	0 (0%)	-26.7%
Group B (n=15)				
• No Involuntary Movement	0 (0%)	0 (0%)	0 (0%)	0.0%
• Sometimes for 5-10 mins	0 (0%)	3 (20%)	5 (33.3%)	33.3%
• Daily for 10-30 mins	4 (26.7%)	8 (53.3%)	9 (60%)	33.3%
• Daily for 30-60 mins	8 (53.3%)	4 (26.7%)	1 (6.7%)	-46.6%
• Daily more than 1 hour	3 (20%)	0 (0%)	0 (0%)	-20.0%
Group C (n=15)				
• No Involuntary Movement	0 (0%)	0 (0%)	9 (60%)	60.0%
• Sometimes for 5-10 mins	0 (0%)	5 (33.3%)	5 (33.3%)	33.3%
• Daily for 10-30 mins	4 (26.7%)	9 (60%)	1 (6.7%)	-20.0%
• Daily for 30-60 mins	8 (53.3%)	1 (6.7%)	0 (0%)	-53.3%
• Daily more than 1 hour	3 (20%)	0 (0%)	0 (0%)	-20.0%
P value	0.242	0.547	0.001**	-

Before treatment BT SP in Group A, 4 (26.7%) patients presented with grade 4 *Spandana*, 11 (73.3%) patients presented with grade 3 *Spandana*, 0 (0%) patients presented with grade 2 *Spandana*, 0 (0%) patients presented with grade 1 *Spandana*, 0 (0%) patients presented with grade 0 *Spandana*.

Toda Sp1 (after 9th sitting of *Matra Basti*) in Group A, 0 (0%) patients presented with grade 4 *Spandana*, 3 (20%) patients presented with grade 3 *Spandana*, 6 (40%) patients presented with grade 2

Spandana, 6 (40%) patients presented with grade 1 *Spandana*, 0 (0%) patients presented with grade 0 *Spandana*.

Spandana Sp2 (after 18 days) in Group A, 0 (0%) patients presented with grade 4 *Spandana*, 0 (0%) patients presented with grade 3 *Spandana*, 4 (26.7%) patients presented with grade 2 *Spandana*, 7 (46.7%) patients presented with grade 1 *Spandana*, 4 (26.7%) patients presented with grade 0 *Spandana*.

Before treatment BT Sp *Spandana* in Group B, 3 (20%) patients presented with grade 4 *Spandana*, 8 (53.3%) patients presented with grade 3 *Spandana*, 4 (26.7%) patients presented with grade 2 *Spandana*, 0 (0%) patients presented with grade 1 *Spandana*, 0 (0%) patients presented with grade 0 *Spandana*.

Spandana Sp1 (after 9th sitting of *Kati Basti*) in Group B, 0 (0%) patients presented with grade 4 *Spandana*, 4 (26.7%) patients presented with grade 3 *Spandana*, 8 (53.3%) patients presented with grade 2 *Spandana*, 3 (20%) patients presented with grade 1 *Spandana*, 0 (0%) patients presented with grade 0 *Spandana*.

Spandana Sp2 (after 18 days) in Group B, 0 (0%) patients presented with grade 4 *Spandana*, 1 (6.7%) patients presented with grade 3 *Spandana*, 9 (60%) patients presented with grade 2 *Spandana*, 5 (33.3%) patients presented with grade 1 *Spandana*, 0 (0%) patients presented with grade 0 *Spandana*.

Before treatment BT *Spandana* in Group C, 3 (20%) patients presented with grade 4 *Spandana*, 8 (53.3%) patients presented with grade 3 *Spandana*, 4 (26.7%) patients presented with grade 2 *Spandana*, 0 (0%) patients presented with grade 1 *Toda*, 0 (0%) patients presented with grade 0 *Spandana*.

Spandana Sp1 (after 9th sitting of *Kati basti and Matra Basti*) in Group C, 0 (0%) patients presented with grade 4 *Spandana*, 1 (6.7%) patients presented with grade 3 *Spandana*, 9 (60%) patients presented with grade 2 *Spandana*, 5 (33.3%) patients presented with grade 1 *Spandana*, 0 (0%) patients presented with grade 0 *Spandana*.

Spandana Sp2 (after 18 days) in Group C, 0 (0%) patients presented with grade 4 *Spandana*, 0 (0%) patients presented with grade 3 *Spandana*, 01 (6.7%) patients presented with grade 2 *Spandana*, 5 (33.3%) patients presented with grade 1 *Spandana*, 9 (60%) patients presented with grade 0 *Spandana*.

Table 13: Gouravata (Heaviness)- Distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

Gouravata (Heaviness)	Before Treatment	After 9th sitting	After 18th day	% difference
Group A (n=15)				
• Absent	5 (33.3%)	9 (60%)	12 (80%)	46.7%
• Present	10 (66.7%)	6 (40%)	3 (20%)	-46.7%
Group B (n=15)				
• Absent	5 (33.3%)	6 (40%)	8 (53.3%)	20.0%
• Present	10 (66.7%)	9 (60%)	7 (46.7%)	-20.0%
Group C (n=15)				
• Absent	3 (20%)	9 (60%)	14 (93.3%)	73.3%
• Present	12 (80%)	6 (40%)	1 (6.7%)	-73.3%
P value	0.770	0.448	0.048*	-

In Group A before treatment, BT G *Gourava* was present in 10 (66.7%) Patients, and absent in 5 (33.3%).

After 9th sitting of *Matra Basti* Group A i.e. G1, 6 (40%) Patients presented *Gourava* and in remaining 9 (60%) patients *Gourava* was absent.

After 18th Day Group A i.e., G2, 3 (20%) patients presented *Gourava* and in remaining 12 (80%) patients *Gourava* was absent.

In Group B before treatment, BT G *Gourava* was present in 10 (66.7%) patients, and absent in 5 (33.3%).

After 9th sitting of *Kati Basti* Group B i.e. G1, 9 (60%) Patients presented *Gourava* and in remaining 6 (40%) patients *Gourava* was absent.

After 18th Day Group B i.e., G2, 7 (46.7%) patients presented *Gourava* and in remaining 8 (53.3%) patients *Gourava* was absent.

In Group C before treatment, BT G *Gourava* was present in 12 (80%) patients, and absent in 3 (20%).

After 9th sitting of *Kati Basti and Matra Basti* Group C i.e. G1, 6 (40%) patients presented *Gourava* and in remaining 9 (60%) patients *Gourava* was absent.

After 18th Day Group C i.e., G2, 1 (6.7%) patients presented *Gourava* and in remaining 14 (93.3%) patients *Gourava* was absent.

Table 14: Aruchi- distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

Aruchi	Before Treatment	After 9 th sitting	After 18 th day	% difference
Group A (n=15)				
• Absent	6 (40%)	14 (93.3%)	14 (93.3%)	53.3%
• Present	9 (60%)	1 (6.7%)	1 (6.7%)	-53.3%
Group B (n=15)				
• Absent	5 (33.3%)	5 (33.3%)	5 (33.3%)	0.0%
• Present	10 (66.7%)	10 (66.7%)	10 (66.7%)	0.0%
Group C (n=15)				
• Absent	5 (33.3%)	13 (86.7%)	15 (100%)	66.7%
• Present	10 (66.7%)	2 (13.3%)	0 (0%)	-66.7%
P value	0.908	<0.001**	<0.001**	-

In Group A before treatment, BT A *Aruchi* was present in 9 (60%) patients, and absent in 6 (40%).

After 9th sitting of *Matra Basti* Group A i.e., A1, 1 (6.7%) patients presented *Aruchi* and in remaining 14 (93.3%) patients *Aruchi* was absent.

After 18th day Group A i.e., A2, 1 (6.7%) patients presented *Aruchi* and in remaining 14 (93.3%) patients *Aruchi* was absent. In Group B before treatment, BT A *Aruchi* was present in 10 (66.7%) patients, and absent in 5 (33.3%).

After 9th sitting of *Kati Basti* Group B i.e. A1, 10 (66.7%) patients presented *Aruchi* and in remaining 5 (33.3%) patients *Aruchi* was absent.

After 18th day Group B i.e., A2, 10 (66.7%) patients presented *Aruchi* and in remaining 5 (33.3%) Patients *Aruchi* was absent.

In Group C before treatment, BT A *Aruchi* was present in 10 (66.7%) patients, and absent in 5 (33.3%).

After 9th sitting of *Matra Basti* and *Kati Basti* Group C i.e., A1, 2 (13.3%) patients presented *Aruchi* and in remaining 13 (86.7%) patients *Aruchi* was absent.

After 18th day Group C i.e., A2, 0 (0%) patients presented *Aruchi* and in remaining 15 (100%) patients *Aruchi* was absent.

Table 15: Straight Leg Raise Test- Distribution in three groups of patients studied @ before treatment, after 9th sitting and after 18th day

Straight Leg Raise Test	Before Treatment	After 9 th sitting	After 18 th day	% difference
Group A (n=15)				
• >90 degree	0 (0%)	0 (0%)	1 (6.7%)	6.7%
• 75 to 90 degree	1 (6.7%)	3 (20%)	8 (53.3%)	46.6%
• 50 to 74 degree	4 (26.7%)	8 (53.3%)	6 (40%)	13.3%
• 30 to 49 degree	6 (40%)	4 (26.7%)	0 (0%)	-40.0%
• <30 degree	4 (26.7%)	0 (0%)	0 (0%)	-26.7%
Group B (n=15)				
• >90 degree	0 (0%)	0 (0%)	0 (0%)	0.0%
• 75 to 90 degree	2 (13.3%)	3 (20%)	8 (53.3%)	40.0%
• 50 to 74 degree	4 (26.7%)	7 (46.7%)	5 (33.3%)	6.6%
• 30 to 49 degree	6 (40%)	5 (33.3%)	2 (13.3%)	-26.7%
• <30 degree	3 (20%)	0 (0%)	0 (0%)	-20.0%
Group C (n=15)				
• >90 degree	0 (0%)	0 (0%)	9 (60%)	60.0%
• 75 to 90 degree	1 (6.7%)	4 (26.7%)	6 (40%)	33.3%

• 50 to 74 degree	4 (26.7%)	9 (60%)	0 (0%)	-26.7%
• 30 to 49 degree	4 (26.7%)	2 (13.3%)	0 (0%)	-26.7%
• <30 degree	6 (40%)	0 (0%)	0 (0%)	-40.0%
P value	0.923	0.828	<0.001**	-

Before treatment BT SLR in Group A, 4 (26.7%) patients presented with grade 4, 6 (40%) patients presented with grade 3, 4 (26.7%) patients presented with grade 2, 1 (6.7%) patients presented with grade 1, 0 (0%) patients presented with grade 0.

Toda SLR1 (after 9th sitting of *Matra Basti*) in Group A, 0 (0%) patients presented with grade 4, 4 (26.7%) patients presented with grade 3, 8 (53.3%) patients presented with grade 2, 3 (20%) patients presented with grade 1, 0 (0%) patients presented with grade 0.

SLR SLR2 (after 18 days) in Group A, 0 (0%) patients presented with grade 4, 0 (0%) patients presented with grade 3, 6 (40%) patients presented with grade 2, 8 (53.3%) patients presented with grade 1, 1 (6.7%) patients presented with grade 0.

Before treatment BT SLR in Group B, 3 (20%) patients presented with grade 4, 6 (40%) patients presented with grade 3, 4 (26.7%) patients presented with grade 2, 2 (13.3%) patients presented with grade 1, 0 (0%) patients presented with grade 0.

SLR SLR1 (after 9th sitting of *Kati Basti*) in Group B, 0 (0%) patients presented with grade 4, 5 (33.3%) patients presented with grade 3, 7 (46.7%) patients presented with grade 2, 3 (20%) patients presented with grade 1, 0 (0%) patients presented with grade 0.

SLR SLR2 (after 18 days) in Group B, 0 (0%) patients presented with grade 4, 2 (13.3%) patients presented with grade 3, 5 (33.3%) patients presented with grade 2, 8 (53.3%) patients presented with grade 1, 0 (0%) patients presented with grade 0.

Before treatment BT SLR in Group C, 6 (40%) patients presented with grade 4, 4 (26.7%) patients presented with grade 3, 4 (26.7%) patients presented with grade 2, 1 (6.7%) patients presented with grade 1, 0 (0%) patients presented with grade 0.

SLR SLR1 (after 9th sitting of *Matra Basti* and *Kati Basti*) in Group C, 0 (0%) patients presented with grade 4, 2 (13.3%) patients presented with grade 3, 9 (60%) patients presented with grade 2, 4 (26.7%) patients presented with grade 1, 0 (0%) patients presented with grade 0.

SLR SLR2 (after 18 days) in Group C, 0 (0%) patients presented with grade 4, 0 (0%) patients

presented with grade 3, 0 (0%) patients presented with grade 2, 6 (40%) patients presented with grade 1, 9 (60%) patients presented with grade 0.

DISCUSSION

Gridhrasi is not a contemporary health problem but it has been familiar to the mankind since *Samhita* period. *Vata* is the *Dosha* responsible for the causation of the disease. The causes of *Gridhrasi* are not described in the classics, but the factors vitiating *Vata* are the *Nidanas* for *Gridhrasi*. Bad posture, irregular and unwholesome dietary habits, travelling in jerky vehicles etc. are most commonly encountered factors in today's life.

Vitiated *Vata* especially *Apana* and *Vyana Vayu* are involved in the *Samprapti* of *Gridhrasi*. The *Samprapti* takes place either by *Dhatukshaya* or *Margavarana* or due to *Agantunja* causes like *Abhigata*. In *Dhatukshayaja Samprapti*, due to improper nourishment of *Rasadi Dhatus*, these *Dhatu* change into *Kshaya Avastha*. *Dhatukshaya* further vitiates *Vata* causing *Gridhrasi*. This type of *Samprapti* can be correlated to the Sciatica caused by degenerative changes. These changes are osteoporosis, spondylosis etc which lead to Sciatica. When *Vayu* is obstructed by *Kapha*, *Ama* etc it gets vitiated leading to *Margavaranajanya Samprapti* of *Gridhrasi*. *Agantunja* factors are mentioned as a cause of *Gridhrasi* by both the systems of medicine.

As per contemporary science, there are multiple conditions where low backache with or without radiation depending upon the structure or nerve root involved is found.

Starting with simple condition like Piriformis, Hamstring and Psoas Syndrome, Back Pocket Sciatica, and some real condition like Degenerative Disc Disorders, Spondylosis, Inter-Vertebral Prolapsed Disc, Facet Arthritis, Lumbar Stenosis, Spondylolisthesis, Cauda Equina Syndrome can be presented to outpatient department with signs and symptoms of *Gridhrasi*.

Hence proper history taking, clinical examination, supported with investigation whenever required are most important for the diagnosis and treatment.

Gridhrasi is classified into *Vataja* and *Vatakaphaja* It can be understood on the basis of symptomatology as follows:

Vataja Gridhrasi- (Dhatukshayajanya): Lumbar spondylosis, Disc Degeneration Degenerative

Spondylolisthesis, Lumbar Arthritis, Disc Herniation, Lumbar Compression Fracture etc.

Vata Kaphaja Gridhrasi (Avaranajanya)- Lumbar Spinal Stenosis, Tumors etc. Finally it can be concluded that *Gridhrasi* can be equated with the condition Sciatica syndrome in modern parlance, which occurs because of Spinal Nerve Irritation and is characterized by pain in the distribution of Sciatic Nerve which begins from buttock and radiates downwards to the posterior aspect of thigh, calf and to the outer border of foot

Various therapeutic modalities have been described for *Gridhrasi* in our treatise. They include *Basti*, *Raktamokshana*, *Agnikarma* etc. For the present study, treatment has been selected according to the principles laid by the classics.

Vasti is a significant, quick acting, perfect sovereign *Panchakarma* procedure. As such *Kativasti* a localized form of *Vasti* strategy is implemented at this contemplation to scrutinize the efficacy in respect with *Vatahara* property of *Dhanwantaram Taila*. *Vata* is an invincible *Dosha* out of triad helps in maintenance of life i.e., *Ayu*. This not only depends upon the physical or materialistic factors but also on the psyche and factors influencing the mind.

A base of *Tila taila*, which is said as the best to, pacified *Vata* with its unctuousness and specific properties of *Vataharatwam*. It is also acts as *Brimhana*, thereby nullifies *Vata*.

Thus the *Dhanwantaram Taila*, has been included in the process of pacifying the *Vata*. The reason behind could be *Vata* pacification through its action on *Vata* and as aromatherapy which activates the nervous system through peripheral nerve endings by direct and also indirect.

The said actions of *Dhanwantaram Taila* in the base of *Tila taila* act traditionally on the *Vata* to neutralize. The process exerts physical pressure that activates nerves and its root cause. Phizoelectricity, physical pressure impulse electricity enhances the charge and discharges of nerve impulse and reduce the pain by producing anesthesia and oil with its properties nourishes the bone. Its action directly on the bone nourishment has to be elucidated in further.

Charaka has classified *Trividha Aoushadhi* as *Anta-Parimarjana*, *Bahi-Parimarjana* and *Shastra-Pranidhana*. *Kati Basti* and *Kati Pichu* are included in *Bahi-Parimarjana Chikitsa*.

Snehana and *Swedana* are the two *Upakramas*, which can be adopted for the management of *Vata Vyadhi*. In *Kati Basti*, *Sukhoshna Taila* is used over the *Kati Pradesha*. While administering on *Kati Pradesha*, it helps in oleation of spine and strengthens the muscles.

Where the *Sneha* by its *Snigdha*, *Guru* and *Ushna Guna* counteracts the *Rooksha*, *Laghu* and *Sheeta Gunas* of *Vata* and by *Ushna Guna* and *Sukoshnata* counteracts *Kapha* also. By penetrating through the *Sukshma Srotases* of the skin to pacify the *Vata* and *Kapha*.

Though it is a commonest diagnosis given to the patients attending the clinics with Sciatica, the current management includes NSAID'S, local anaesthesia, Steroids, sedatives etc., gives temporary relief from pain but has got severe adverse effects. In spite of recent advances in western science, the treatment is mere-symptomatic. But symptomatic management of any disease is incomplete as it cannot break up the chain of pathogenesis. So need arise for search of a safer, better and cheaper treatment. *Matrabasti* and *Kati Basti* fulfill these criteria. The end results of each therapy were assessed individually on various parameters, monitored cautiously, subjected to statistical analysis and finally inferences were drawn and are hereby put forward.

Observations

- **Age:** Maximum numbers of patients were from age group 41-50 years (37.8%). According to modern science there is progressive decrease in degree of hydration of the intervertebral disc with age that leads to the cycle of degeneration resulting in disc problems and causing *Gridhrasi*. Moreover, young adults are more expose to strong biochemical force and heavy work in comparison to children, which may also create this condition. Hence, prevalence of Sciatica is high in young and middle-aged people, which is supported by the findings of the present study.
- **Gender:** Maximum number of subjects were male (57.80%) in male who are at hard physical works and in particular frequent lifting and postural stress are known to increase the risk of Sciatica.
- **Education:** In the study majority of people were read and write, graduates (46.7%). As sample size was small no particular conclusion was drawn.
- **Ahara:** In the present study most of the subjects were having Mixed diet (86.7%) may be one of the cause for *Prakopa* of *Vatadosha*.
- **Occupation:** Here majority of patients belong to Sedentary life (68.9%). May cause *Kaphaprakopa* followed by *Margavarana* of *Vata*
- **Socio-economic status:** In present study majority of patients were from Lower middle (40%), upper middle (33.3%). They are the people in society, who face maximum strain physically and mentally to maintain their living standards in this heavy inflection period.

Effect of Therapy

In this study, the effect of the therapies was assessed on each sign and symptom of *Gridhrasi*. These signs and symptoms were given score before and after treatment and were assessed statistically for the level of significance.

Ruk

There were no comparative significant statistical changes in all the three groups with P value 0.067. But clinically overall reduction in pain was highly significant in Group C 73.3% where as in Group A 26.7% and Group B 6.7%.

Grade of improvement was better in Group C (73.3%) than Group A (26.7%) and Group B (6.7%).

In Group A, *RUK* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Ruk* with percentage of improvement was 73.3% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

Toda

There were no comparative significant statistical changes in all the three groups with P value 0.015. But clinically overall reduction in pricking pain was highly significant in Group C 46.7% and Group A 13.3%.

Grade of improvement was better in Group C (46.7%) than Group A (13.3%) and Group B 0 (0%).

In Group A, *Toda* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Toda* with percentage of improvement was 46.7% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

Spandana

There were no comparative significant statistical changes in all the three groups with P value 0.242. But clinically overall reduction in pricking pain was highly significant in Group C 60% and Group A 26.7%.

Grade of improvement was better in Group C (60%) than Group A (26.7%) and Group B (0%).

In Group A, *Spandana* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Toda* with percentage of improvement was 60% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

Numbness

There were no comparative significant statistical changes in all the three groups with P value 0.107. But clinically overall reduction in pricking pain was highly significant in Group C 80% and Group A 66.7%.

Grade of improvement was better in Group C (80%) than Group A (66.7%) and Group B (40%).

In Group A, *Supti* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Supti* with percentage of improvement was 80% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

Gourava

There were no comparative significant statistical changes in all the three groups with P value 0.107. But clinically overall reduction in pricking pain was highly significant in Group C 73% and Group A 46.7%.

Grade of improvement was better in Group C (73%) than Group A (46.7%) and Group B (20%).

In Group A, *Gourava* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Supti* with percentage of improvement was 73% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

Aruchi

There were no comparative significant statistical changes in all the three groups with P value 0.107. But clinically overall reduction in pricking pain was highly significant in Group C 66% and Group A 53%. Grade of improvement was better in Group C (66%) than Group A (53%) and Group B (0%).

In Group A, *Aruchi* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Supti* with percentage of improvement was 66% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

Tenderness (*Sparshasahyata*)

There were no comparative significant statistical changes in all the three groups with P value 0.638. But clinically overall reduction in pricking pain was highly significant in Group C 73.3% and Group B 20%, Group A 13.3%.

Grade of improvement was better in Group C (73.3%) than Group B 20%, Group A (13.3%).

In Group A, *Toda* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. In Group B patients subjected to *Kati Basti* relieved effectively because of close contact of warm oil. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Toda* with percentage of improvement was 73.3% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

S.L.R

There were no comparative significant statistical changes in all the three groups with P value 0.923. But clinically overall reduction in pricking pain was highly significant in Group C 60% and Group A 6.7%. Grade of improvement was better in Group C (60%) than Group A (6.7%) and Group B (0%). In Group A, *Toda* relieved gradually may be due to sustained actions of the potency of cluster of drugs in *Dhanwantaram Taila*. The patients who were treated with *Kati Basti* and *Matra Basti* in Group C showed improvement in *Toda* with percentage of improvement was 60% which shows combined action of *Matra Basti* and *Kati Basti* played a tremendous role in relieving the symptom.

Mode of Action of Basti

Eliminative or purificative action of Basti

Basti enters the *Pakvashaya* which the main site of *Vata Dosha* and destroys it which is the originator of all diseases. By subsiding the *Vata* all diseases located in the other parts of the body also become allayed just as by the eradication of the roots of a plant, the stem, the branches, sprouts. However fruits, leaves etc. also vanish.

Basti administered into the *Pakvasaya* draws the *Dosha/Mala* from all over the body from the foot to the head by virtue of its *Virya*, just as the sun situated in the sky draws the moisture from the earth by virtue of its heat.

As the cloth sucks up the pigment only from the water dyed with saf-flower, similarly *Basti* eliminates only the waste substances (*Mala*) from the body.

Systemic action of Basti

The *Virya* of the drugs administered through the *Basti* into the *Pakvashaya* reaches the whole body through the channels (*Srotas*), as the active principles in the water when poured at the root of the tree reaches the whole plant.

Nutritive action of Basti

Just as a tree fed with water at its roots, puts forth green leaves and delicate sprouts, and in due

time grows into a big tree, full of blossom and fruit, similarly does a man grow strong by means of *Anuvasana Basti*. The fact that *Basti* introduced into *Pakvashaya* reaches all over the body, is well explained by *Chakrapani*. He has quoted the reference of *Parasara* that *Guda* is the *Mula* of the body where all the *Siras* located. The *Sneha* administered through *Guda* reaches up to head giving the nutrition to the body.

Though *Basti* drug quickly comes out alone or with stool, its effect took place all over the body with the help of *Vayu*. This action takes place just like as sun draws moisture from the earth. As firstly the *Virya* of the *Basti* drugs reaches the *Apana Vayu*, then it is handed over to *Samana Vayu*. After nourishing *Samana Vayu* it reaches the *Vyana Vayu*, thereafter it acts on *Udana Vayu* and *Prana Vayu*. When all these five types of *Vata* get their normal state, they promote health. Then these *Virya* of *Basti* drug acts on the *Pitta* and *Kapha* to bring them in normal states and provides them nourishment. Just as whole farm gets its nourishment by water supplied to it through channels, the whole body gets nourishment by the *Virya* of *Basti* drugs carried by five types of *Vata* through *Srotasa*.

The same action of *Basti* drugs has been described by *Acharya Charaka* as the *Basti*, when lying in the *Pakvashaya*, draws by its *Virya* and morbid *Dosha* lodged in the entire body from the foot to the head, just as the sun situated in the sky sucks up the moisture from the earth.

Basti performs the function of *Apananulomana* hence increases the *Jatharagni* ultimately normalize the *Agni* which is said to be the main cause of any disease. Thus *Basti* has its effect on two important factors viz. *Vata* and *Agni* which is responsible for proper formation of *Dhatu* and thereby establishes their normal functions. Active principles of the ingredients used in the *Basti* gets absorbed and then through general circulation reaches at the sites of the lesion and relieves the disease. That is why *Acharya Sushruta* has mentioned that by using the different ingredients, *Basti* can cure *Paitika*, *Kaphaja*, *Raktaja*, *Sansargaja* and *Sannipatika* disorders through it is the best treatment for *Vata Dosha*.

CONCLUSION

- 1) Based on the symptomatology, *Sciatica* comes under the purview of *Gridhrasi*.
- 2) In combined treatment of *Kati Basti* and *Matra Basti* in Group C there was tremendous response in relieving *Ruk* (73%), *Toda* (46%), *Spandana* (60%), *Supti* (80%), *Gourava* (73%), *Aruchi* (66%), *Sparshasahyata* (73.3%) SLR (60%).

- 3) In Group A patients subjected to *Matra Basti* was effective in relieving *Ruk* (26.7%), *Toda* (13.3%), *Spandana* (26.7%), *Supti* (66.7%), *Gourava* (46.7%), *Aruchi* (53.3%), *Sparshasahyata* (13.3%) SLR (6.7%).
- 4) In Group B patients subjected to *Kati Basti* was effective in relieving *Ruk* (6.7%), *Toda* (0%), *Spandana* (0%), *Supti* (40%), *Gourava* (20%), *Aruchi* (0%), *Sparshasahyata* (20%) SLR (0%).
- 5) Statistically all the three groups showed significant changes in improving all the subjective and objective parameter.
- 6) Moderate to marked relief of the symptoms of *Sciatica* was observed in all the three groups. But overall response was significantly more in Group C when compared to Group A (0%) and Group B.
- 7) The better response in Group C is due to combined procedural influence.
- 8) No complications were observed during the study.

REFERENCES

1. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Sutrasthana, Chapter 20, Verse 18 (16), Dwivedi Lakshmidhar editor. 1st edn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2004; p 368.
2. Agnivesa, Charakasamhita, Ayurveda Deepika commentary of Chakrapani, Edited by Dr.Ramkaran sharma and Vaidya Bhagawandash, Chaukamba Surabharati prakashan, Varanasi, Reprint-2010, Chikista sthana, Volume-5, chapter-28, verse-56-57, pg-35.
3. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Sutrasthana, Chapter 19, Verse 18 (16), Dwivedi Lakshmidhar editor. 1st edn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2004; p 345.
4. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Chikitsa sthana, Chapter 28, Verse 18 (16), Dwivedi Lakshmidhar editor. 1st edn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2004; p 868.
5. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Sutra sthana, Chapter 14, Verse 18 (16), Dwivedi Lakshmidhar editor. 1st edn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2004; p 267.
6. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Sutra sthana, Chapter 5, Verse 95, Dwivedi Lakshmidhar editor. 1st edn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2004; p 187.
7. Agnivesha, Charaka Samhita with Ayurveda Dipika Commentary. Sidhi sthana, Chapter 10, Verse 43, Dwivedi Lakshmidhar editor. 1st edn (reprint), Varanasi: Chaukhambha Krishnadas Academy; 2004; p 1000.

Cite this article as:

N Haritha, Rashmi R, Nihil Gigi, Binu.M.B. A Clinical Evaluation of Matra Basti And Kati Basti With Dhanwantaram Taila in The Management of Gridhrasi International Journal of Ayurveda and Pharma Research. 2021;9(4):17-31.

Source of support: Nil, Conflict of interest: None Declared

*Address for correspondence

Dr. N Haritha

Final year PG Scholar
Department of Panchakarma
RAMCH & RC, Bengaluru
Karnataka, 560064

Email:

mayurisandeep9@gmail.com

Mobile: +91 78297795

Disclaimer: IJAPR is solely owned by Mahadev Publications - dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJAPR cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of IJAPR editor or editorial board members.