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Evaluation of clinical efficacy of Vaitarna Basti and Rasnadi Gutika in the management of Gridhrasi W.S.R. Sciatica

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Abstract

Gridhrasi is one of the commonest disorders found in clinical practice. Sciatica may be equated with Gridhrasi, which is characterized by pain, weakness, numbness, and other discomforts along the path of the sciatic nerve often accompanies low back pain. In the present study, total 40 diagnosed patients of Gridhrasi of age group 20-60 years were registered and randomly allotted into 2 groups, out of which 34 patients completed treatment. In group A, Rasnadi Gutika 2 tablets thrice daily after meal (each tab of 500mg. approx) with lukewarm water was given for 30 days. In group B; Vaitarna Basti (385ml) was given irrespective of food for 16 days. Observations and results were assessed according to specially prepared grading system for pain, pricking sensation, stiffness, twitching, anorexia, torpor, tenderness, SLR test, reflexes etc. Results obtained in both the groups were statistically similar approximately, but on the basis of percentage relief in sign and symptoms of the disease, mild improvement was found in 52.94%, 5.88% patients in group A and group B respectively. 11.09% patients in group A and 35.29% patients in group B were moderately improved and remaining 35.29% and 58.83% patients showed marked improvement in group A and group B respectively. None of the patient was remain unchanged in both the group and none of the patients showed complete remission. It is obvious that overall effect of Vaitarna Basti (Group B) was better on the patients of Gridhrasi in comparison to oral Rasnadi Gutika group (Group A).

Keywords: Gridhrasi, Sciatica, Rasnadi Gutika, Vaitarna Basti

1. Introduction

In modern era, there are many diseases which are emerging at a fast pace. Sciatica is one of them which is characterized by pain begins in the lumbo-sacral region, radiating to the lower limb through buttock, thigh, calf up to the foot caused by compression, irritation or inflammation of the sciatic nerve. The prevalence of sciatic symptoms reported in the literature varies considerably ranging from 1.6% in the general population to 43% in a selected working population [1]. Sciatica has an annual incidence of 5% in the world [2]. Symptoms of sciatica are mostly observed in people between the ages of 30 to 50 [3]. Low back pain is the most common cause of disability in patients under 45 years of age [4]. The symptom of sciatica can be distinguished from low back pain and referred low back pain by the radiation of pain into the buttock and leg and by clinical findings. An estimated 5-10% of patients with low back pain have sciatica [5]. Gridhrasi is included among 80 Vatananatmaja disorders [6] and it can be equated with Sciatica. It is characterized with the onset of Ruka (Pain), Toda (Pricking sensation) and Stambha (Stiffness) primarily in Sphika (Gluteal region) and then radiating distally to Kati-Prishtha (low back), Janu (knee), Jangha (thigh) till Pada (feet) [7]. According to Acharya Sushruta and Vagbhatta, the cardinal feature of Gridhrasi is radiating pain in the affected leg and restricted upward lifting of the affected lower limb i.e. Sakthiutkshepanigraha [8]. When Kapha gets involved with Vata, produces symptoms like Tandra, Gaurava, and Arochaka, so on the basis of Dosha involvement Gridhrasi can be of two types: 1. Vataja Gridhrasi, 2. Vatakaphaja Gridhrasi [9]. In Ayurvedic classics, the root cause of Vata disorder is mentioned as either Dhatukshaya (degeneration) or Margaavarana (obstruction in micro channel) [10]. Being a Vata disorder degeneration and obstruction in micro channel may be considered as the fundamental causes of Gridhrasi.

In modern science, treatment of sciatica include use of analgesics and few surgical procedures, having insignificant role in achieving the success in addition to their adverse

effect, whereas *Ayurvedic* treatment is considered as safe and more effective for this dreadful disease. Owing to the above mention problem and management, it is imperative to explore newer efficacious *Ayurvedic* drugs and procedures to tackle such disease entities. In *Ayurvedic* texts several oral medicinal preparations have been mentioned for the treatment of *Gridhrasi*. *Rasnadi Gutika* is one of them which have been mentioned by *Chakradutta* [11]. So in this study *Rasnadi Gutika* in group A has been evaluated for its effect on the *Gridhrasi*.

Basti is best remedy for alleviation of Vata Dosha as well as Pitta, Kapha and Rakta Dosha [12]. Charaka has considered Basti therapy as half of the treatment of all the diseases while other consider it as the complete remedy for all the ailments [13]. Due to its promising result practically proven in Gridhrasi, a course of 16 Vaitarna Basti with "cow milk" was chosen in group B.

2. Materials & methods

Patients suffering from *Gridhrasi* who attended the O.P.D. and I.P.D. of *Panchkarma* department of Rishikul Government P. G. Ayurved college & Hospital, Haridwar were selected for the present study irrespective of sex, religion, occupation etc of age between 20-60 years. Total 40 patients were registered in the clinical trial (20 patients in each group). These registered patients were randomly categorized into two groups viz. *Rasnadi Gutika* group (Group A) and *Vaitarna Basti* group (Group B).

2.1 Inclusion Criteria

2.1.1 Subjective criteria

- Presence of pain, pricking sensation, stiffness and twitching in the gluteal region, low back, thigh, knee, calf and feet.
- Tenderness along the course of sciatic nerve.
- Patients between age group of 20 to 60 years were included.

2.1.2 Objective criteria

- Positive S.L.R. test in affected leg as objective measure for diagnosis as well as for improvement of the treatment.
- Popliteal compression test.
- Foot flexion test.
- Knee-jerks and ankle-jerks.

2.2 Exclusion criteria

- 1. Carcinoma of spine
- 2. Tumour of cauda equina and lumbosacral plexus
- 3. Uncontrolled Diabetes mellitus
- 4. Cardiovascular disease
- 5. Pregnancy
- 6. Tuberculosis of Vertebral column

2.3 Investigation

- Hematological analysis Total leucocyte count, Differential leucocyte count, Erythrocyte sedimentation rate, Haemoglobin gm%
- Routine and microscopic examination of urine and stool
- X-ray of lumbo-sacral region (anterio-posterior & lateral view)
- Bio-chemical examinations- Blood sugar (fasting and post prandial), Serum cholesterol, Alkaline phosphatase.

2.4 Grouping & Posology

Group A

Total no. of registered patients- 20

Drug - Oral drug i.e. Rasnadi Gutika.

Dose - 2 tablets thrice daily after meal (each tab of 500mg.)

Duration - 30 days

Anupana - Luke warm water.

Group B

Total no. of registered patients- 20

Therapy - *Vaitarna Basti* along with *Sarvanga Abhyanga* for 15-20 minutes with lukewarm *Til Taila* and *Swedana* by using *Nadi Sweda* (5-10 minutes).

Quantity of *Basti Dravya* - In quantity of 385 ml of *Vaitarna Basti* was given irrespective of food.

Duration - 16 days.

Preparation of Vaitarna Basti.

Vaitarna Basti contain following ingredients in different proportion as shown below-

Saindhava Lavana - 10 gm Guda - 25 gm Til Taila - 100 ml Chincha Kalka - 50 gm Cow Milk - 200 ml

Saindhava Lavana and Guda were mixed together in the beginning followed by addition of Til Tail and mixed properly. By this process it becomes homogenous emulsion. Now Chincha (Tamarindus Indica) Kalka was mixed and churned properly and luke warm cow milk added to it. Mixture is then filtered through sieve. This homogeneous mixture of drugs was used for rectal administration.

3. Criteria of analyzing results

The improvement was assessed mainly on the basis of relief in the chief symptoms of the disease.

Table 1: Scoring pattern for assessment

Ruka (Pain) **Toda** (Pricking Sensation) No pricking sensation - 0 No pain - 0 Occasional pain - 1 Occasionally pricking Mild pain but no difficulty in sensation - 1 Mild pricking sensation - 2 Walking - 2 Moderate pain and slight Moderate pricking difficulty in walking - 3 sensation - 3 Severe pain with marked Marked pricking sensation difficulty in walking - 4 Stambha (Stiffness) Spandana (Twitching) No stiffness - 0 No Twitching - 0 Sometimes for 5-10 Sometimes for 5 - 10minutes - 1 minutes - 1 Daily for 10 - 30 minutes - 2 Daily for 10-30 minutes - 2 Daily for 30 - 60 minutes -3 Daily for 30-60 minutes - 3 Daily more than 1 hour - 4 Daily more than 1 hour - 4 Tandra (Torpor) Aruchi (Anorexia) No anorexia - 0 No torpor - 0 Mild torpor- 1 Mild anorexia - 1 Moderate torpor - 2 Moderate anorexia - 2 Severe torpor - 3 Severe anorexia - 3 Kati Graha Forward bending up to Gaurava (Heaviness) toes-0 No heaviness- 0 Forward bending up to Mild heaviness - 1 middle leg- 1 Moderate heaviness - 2 Forward bending up to knee- 2 Severe heaviness - 3 Forward bending up to mid

| Tenderness: No tenderness- 0 Subjective experience of tenderness 1 Wincing of face on pressure 2 Wincing of face and withdrawal of the affected part on touch- 3 Resists touch 4 | Sakthiutkshepanigraha (S.L.R. Test) • > 90° 0 • 71° - 90° - 1 • 51° - 70° - 2 • 31° - 50° - 3 • Up to 30° - 4 |
|---|---|
| Dehasyapi Pravakrata (Scoliosis) No scoliosis - 0 Mild scoliosis - 1 Moderate scoliosis - 2 Severe scoliosis - 3 | Ankle Jerk: Normal - 0 Diminished /Slightly Exaggerated - 1 Absent /HighlyExaggerated - 2 |
| Knee Jerk: Normal - 0 Diminished /Slightly | Walking Time (Time taken to cover 20 meters) (a) Upto 20 sec 0 (b) 21 - 40 sec - 1 (c) 41 - 60 sec - 2 (d) More than 60 sec - 3 |

3.1 Overall effect of therapy

The overall effect of therapy was grouped into 5 types.

- 1 Complete relief (100% relief)
- 2 Marked Improvement (≥ 75 % relief)
- 3 Moderate Improvement (≥ 50 -74 % relief)
- $4 Mild improvement (\geq 25 49 \% relief)$
- 5 Unchanged (< 25% relief)

4. Statistical Analysis

The information gathered on the basis of observations was subjected to statistical analysis. Students' paired't' test was applied for the subjective and objective parameters to analyze the effect of individual therapy in the both groups.

The results were interpreted at p<0.05, p<0.01 and p<0.001 significance levels. The obtained results were interpreted as: Insignificant P > 0.05, Significant P < 0.05, Highly Significant P < 0.001

5. Observations and results

Out of 40 patients, equal number patients i.e. 17 in each group completed the therapy and follow up period. So in this study, general observations were made on 40 patients and results were assessed on 34 patients.

In the clinical study, 30% of patients belonged to the age group of 31-40 & 41-50 years each, 62.5% were female patients in this study, out of them 56% females had attained menopause. Majority of them belonged to Hindu religion (87.5%), house wives (57.5%), educated up to primary level (50%), and 65% were from urban area. Maximum no. of patients (67.5%) had tendency of constipation, 57.5% were having tension, 67.5% patients were of *Heena Vyayama Shakti*, 62.5% patients were *Vata-kaphaja* constitution, and traumatic history was reported in 37.5% patients.

Cardinal symptoms like pain in sciatic nerve distribution and SLR test positive were found in all the patients i.e. 100%. Pricking sensation was present in 55% patients, stiffness in 82.5%, twitching in 52.5% patients. Anorexia was seen in 22.5% patients, torpor in 15%, heaviness (*Gaurava*) in 37.5%, scoliosis (*Dehasyapi Pravakrata*) in 27.5%, salivation (*Mukhapraseka*) was present in 27.5% patients.

52.5% patients were having *Vata-Kaphaja* type of *Gridhrasi* whereas 47.5% patients were having *Vataja* type of *Gridhrasi*. Number of patients affected with right leg were more (60%) that left leg affected (40%) in this disease. 30% and 40% patients were having diminished knee jerk and ankle jerk respectively.

100% patients were having tenderness at root of sciatic nerve. Positive popliteal compression test was found in 95% patients whereas Foot flexion test was positive in 80% patients. Muscle weakness in 30% and muscle wasting was found in 12.5% patients. 37.5% of the patients can cover 20 meter distance in 21-40sec., 30% in 41-60 sec., 17.5 % in 20 sec., and only 15% of the patients can cover the distance in > 60 sec.

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|---------------------|--------------|---------|---------------|----------|---------|
| Table 2: Effect of | LIICIADV OII | various | Darameters in | CHOUD-A | (11-1/) |
| | | | P | | (,) |

| Sign & Symptoms | n | Mean score | | % | S.D | S.E | Т | n . |
|--------------------------------|----|------------|------|--------|------|------|-------|---------|
| Sign & Symptoms | n | B.T. | A.T. | Relief | S.D | S.E | 1 | p |
| Pain (Ruka) | 17 | 2.41 | 0.76 | 68.29 | 0.49 | 0.11 | 13.78 | < 0.001 |
| Pricking sensation (Toda) | 09 | 2.66 | 1.11 | 58.33 | 0.72 | 0.24 | 6.42 | < 0.001 |
| Stiffness (Stambha) | 11 | 2.81 | 1.00 | 64.51 | 0.40 | 0.12 | 14.90 | < 0.001 |
| Twitching (Spandana) | 10 | 2.40 | 0.8 | 66.66 | 0.51 | 0.16 | 9.79 | < 0.001 |
| Torpor (Tandra) | 2 | 2 | 0.50 | 75 | .70 | 0.50 | 3 | >0.05 |
| Heavinesss (Gaurava) | 5 | 2.6 | 0.8 | 69.23 | 0.44 | 0.20 | 9 | < 0.01 |
| Anorexia(Aruchi) | 2 | 3.00 | 1.00 | 66.66 | 0 | 0 | 1.41 | >0.05 |
| Scoliosis (Dehasapravakrata) | 4 | 1.00 | 0.75 | 25 | 0.5 | 0.25 | 1 | >0.05 |
| Stiffness in back (Kati Graha) | 10 | 2.5 | 0.9 | 64 | 0.52 | 0.16 | 9.79 | <.001 |
| Tenderness | 10 | 3.3 | 1.3 | 60.60 | 0.66 | 0.22 | 9 | <.001 |
| S L R (Sakthiutkshepanigraha) | 17 | 2.94 | 1.23 | 58 | 0.46 | 0.11 | 14.97 | <.001 |
| Walking time | 17 | 2.05 | 0.76 | 62.85 | 0.70 | 0.17 | 7.60 | <.001 |
| Knee jerk | 17 | 0.23 | 0.17 | 25 | 0.24 | 0.05 | 1 | >0.05 |
| Ankle jerk | 17 | 0.29 | 0.17 | 40 | 0.33 | 0.08 | 1.460 | >0.05 |

Group A (*Rasnadi Gutika*), provided highly significant (p<0.001) result on cardinal features and associated features like pain(68.29%), Pricking sensation (58.33%), stiffness (64.51%), twitching (66.66%), S.L.R. (58%), stiffness in back (64%), Tenderness (60.60%) and walking time (62.85%)

whereas significant (p<0.01) result showed in heaviness (69.23%), insignificant result (p>0.05) was found in torpor (58.33%), anorexia (66.66%), scoliosis (25%), Knee jerk (25%), Ankle jerk(40%).

Table 3: Effect of therapy on various parameters in Group B (n-17)

| St | | Mean score | | % | C.D. | C.E. | T | |
|--------------------------------|----|------------|------|--------|--------|------|-------|---------|
| Sign & Symptoms | n | B.T. | A.T. | Relief | S.D | S.E | T | p |
| Pain (Ruka) | 17 | 2.70 | 0.70 | 73.91 | 0.61 | 0.14 | 13.45 | < 0.001 |
| Pricking sensation (Toda) | 09 | 3.33 | 0.77 | 76.66 | 0.52 | 0.17 | 14.54 | < 0.001 |
| Stiffness (Stambha) | 11 | 3.36 | 1.09 | 67.56 | 0.46 | 0.14 | 16.13 | < 0.001 |
| Twitching (Spandana) | 07 | 3.14 | 0.57 | 81.81 | 0.97 | 0.36 | 6.97 | < 0.001 |
| Torpor (Tandra) | 1 | 1.00 | 0 | 100 | 0 | 0 | 0 | >0.05 |
| Heavinesss (Gaurava) | 6 | 2.666 | 0.33 | 87.15 | 0.5163 | 0.21 | 11.06 | <.001 |
| Anorexia (Aruchi) | 3 | 2.33 | 0.66 | 71.42 | 0.577 | 0.33 | 5.0 | < 0.05 |
| Scoliosis (Dehasapravakrata) | 4 | 1.25 | 0.75 | 40 | 0.7071 | 0.5 | 1 | >0.05 |
| Stiffness in back (Kati Graha) | 14 | 2.5 | 0.71 | 71.42 | 0.5789 | 0.15 | 11.55 | <.001 |
| Tenderness | 17 | 2.92 | 1.07 | 63.41 | 0.6629 | 0.17 | 10.48 | <.001 |
| S L R (Sakthiutkshepanigraha) | 17 | 2.94 | 0.70 | 76 | 0.44 | 0.11 | 21.07 | <.001 |
| Walking time | 17 | 2.0 | 0.64 | 67.64 | 0.61 | 0.15 | 9.2 | <.001 |
| Knee Jerk | 17 | 0.41 | 0.29 | 28.57 | 0.33 | 0.08 | 1.460 | >.05 |
| Ankle jerk | 17 | 0.23 | 0.12 | 50 | 0.33 | 0.08 | 1.460 | >0.05 |

Group B (*Vaitarna Basti*), provided highly significant (p<0.001) result on cardinal features and associated features like pain (73.91%), pricking sensation (76.66%), stiffness (67.56%), twitching (81.81%), S.L.R(76%), heaviness (87.15%), stiffness in back (71.42%),tenderness (63.41%) and

walking time (67.64%) whereas significant result (p<0.05) showed in anorexia (71.42%), insignificant result(p>0.05) was found in torpor (100%), scoliosis (40%), Knee jerk(28.57%), Ankle jerk(50%).

Table 4: Effect of therapy on *Dosha* involvement in *Gridhrasi* in Group A (n-17) and Group B (n-17)

| DL- | | Mean score | | % | S.D | S.E | 4 | D | |
|---------|--------------|------------|------|------|--------|------|------|-------|-------|
| | Dosha | n | B.T | A.T | Relief | 9.D | S.E | ι | P |
| Craum A | Vataja | 9 | 2.20 | 0.92 | 58.13 | 0.74 | 0.25 | 5.17 | <.001 |
| Group A | Vata kaphaja | 8 | 2.51 | 0.94 | 62 | 0.51 | 0.15 | 10.20 | <.001 |
| Group B | Vataja | 8 | 2.61 | 0.74 | 71.69 | 0.69 | 0.23 | 8.06 | <.001 |
| | Vata-kaphaja | 9 | 2.56 | 0.57 | 77 | 0.57 | 0.17 | 11.60 | <.001 |

In group A, relief in *Vataja Gridhrasi* was 58.13%, while it was 62% in *Vata-Kaphaja*. In group B, relief in *Vataja Gridhrasi* was 71.69%, while it was 77% in *Vata-Kaphaja*. The result was statistically highly significant (p<0.001) in both group.

Table 5: Overall effect of therapy (n-34)

| | No. of patients | | | | | | |
|----------------------|------------------|-------|-------------------|-------|--|--|--|
| Effect of the second | Group | A | Group B | | | | |
| Effect of therapy | No of pt. (n-17) | % | No. of pt. (n-17) | % | | | |
| Unchanged | 00 | 00 | 00 | 00 | | | |
| Mild improvement | 09 | 52.94 | 01 | 5.88 | | | |
| Moderate improvement | 02 | 11.07 | 06 | 35.29 | | | |
| Marked improvement | 06 | 35.29 | 10 | 58.83 | | | |
| Complete remission | 00 | 00 | 00 | 00 | | | |

In Group A (*Rasnadi Gutika*), out of 17 patients, after the completion of treatment, mild improvement was found in 09 (52.94%) patients, 06 (35.29%) patients were marked improved and remaining 02 (11.07%) patients showed moderate improvement. None of the patient showed complete remission.

In Group B (*Vaitarna Basti*), out of 17 patients, marked improvement was found in 10 (58.83%) patients. 06 (35.29%) patients were moderately improved and remaining 01 (5.88%) patient showed mild improvement. None of the patient showed complete remission and unchanged in both the groups.

No recurrence of symptoms was reported in 70.58% of patients during the period of follow-up of one month, where as recurrence of symptoms was found in only 29.42% of patients. In the study recurrence was found more in Group A in comparison to Group B.

6. Discussion

In this study, 30% patients were belong to 41-50 years of age group which is Vata Prakopaka Kala and 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 disarrangement and causing Gridhrasi. The same incidence was found in age group of 31-40 years which can be supported by the fact that young adults are more expose to heavy work as well as they face more stress in their life in comparison to others, which may also create this condition. Psychological factors play an important role in low back pain. Hence, prevalence of sciatica is high in young and middle age group of people because they face various kinds of psychological ups and downs in today's competitive era and this fact was supported by the findings of the present study. 62.5% were females and 57.5% were housewives because they stand or work in unusual postures for long periods. 65% patients belonged to urban area; this is because of fast & sedentary life style of the people who belonged to urban area. Most of the female patients i.e. 56% were having menopausal history as this menopausal age is Vata Prakopaka Kala and Vata is the causative factor of Gridhrasi. Normal level of oestrogen inhibits osteoclastic activity and increases absorption of calcium from the gut [14]. All these lead to increased bone mineralization, but after menopause oestrogen level decreases which degeneration and fracture of spine which contribute to develop sciatica. 62.5% patients were having Vata-Kapha Prakriti. This study suggests that Vata plays a major role in the manifestation of the disease.

Gridhrasi is a painful condition which hampers the daily activities of the affected person and makes them unable to walk. Being a Vata Nanatmaja disorder, all the Vataprakopaka diet and regimen should be avoided in Gridhrasi. Commonest

cause of sciatica i.e. disc bulge is due to degenerative changes which is indicative of *Vata Prakopa* hence *Basti* may be considered as best therapy.

All the drugs chosen for the study were having *Ushna Virya* and *Kapha-Vata Shamaka* properties. So by their virtue, they help in dissolving the *pathogenesis* of *Gridhrasi* as it is a *Vata-Pradhana* disease or sometimes *Kapha* is in association with *Vata*. All the drugs were having anti-inflammatory [15, 16] and analgesic properties as well. Therefore helps in relieving the pain and inflammation of nerve, if any.

Rasna is specifically indicated in *Gridhrasi* due to its *Vata-Kapha* Shamaka [17] and *Vedanasthapana* [18] properties. The *Deepana*, *Amapachan* [19, 20] and *Rasayana* [21] properties of *Rasna* is overall beneficial for body systems.

Guggulu is a drug of choice in cases of Vata disorder [22] because of its Vata-Kapha Shamaka [23] and Vedanasthapana [24], Rasayana [25] properties. Though this Vaitarna Vasti preparation is mentioned in chapter Vastikarmadhikara in Vangasen Samhita [26], the efficacy of Rasnadi Gutika in Vata disorders including Gridhrasi has been already proved in various clinical trials.

Moreover, the contents of *Vaitarna Basti*, is having *Vata-Kapha Shamaka*, *Vedanasthapaka* and *Nadibalya* properties. *Basti* possess *Vatanulomaka* and *Saraka* properties as well and also balance the *Agni*. When such prepared mixture was introduced in the body in the form of *Vaitarna Basti*, properties of its content provide more potency to *Basti*, thereby bringing the patient to a physiological harmony. *Basti* is such a unique treatment which can correct local as well as systemic pathology and the best treatment for the correction of *Vata*. It reflects the better effect of *Basti Karma* then *Shamana* drug.

In maximum number of patients i.e. in 70.58%, no recurrence of symptoms was reported during the period of follow-up of one month. This may be due to selected treatment worked at the level of *Samprapti* and minimize the chances of recurrence of the disease.

7. Conclusion

Vaitarna Basti having Vatashamana and Vatanulomana property may be ideal choice in the management of Gridhrasi, Vaitarna Basti seems to be more effective than Rasnadi Gutika in most of the signs and symptoms of Gridhrasi. It is more effective in Vata Kaphaja type of Gridhrasi, may be due to mixed ingredients of Vata and Kapha Shamana property. Statistically these results cannot be proved as results obtained in both the groups are approximately similar.

Though both the treatment provided good improvement but *Vaitarna Basti* provided better relief in all chief complaints i.e *Ruka*, *Toda*, *Stambha* and *spandana* with dramatic improvement in straight leg raising test (S.L.R) but on the basis of percentage relief on sign and symptoms, overall effect of *Vaitarna Basti* (Group B) was better on the patients of *Gridhrasi* in comparison to oral *Rasnadi Gutika* group (Group A).

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