

International Research Journal of Ayurveda & Yoga

Vol. 4 (11),38-48, November, 2021

ISSN : 2581-785X; <https://irjay.com/>

DOI: <https://doi.org/10.47223/IRJAY.2021.41106>



A Controlled and Comparative Study on *Vatari Guggulu* and *Shiva Guggulu* in the Treatment of *Gridhrasi*.

Veena C.S¹, Roopa Bhat².

1. PG Scholar Department of Kayachikitsa , Dhanvantari Ayurveda College, Hospital& Pg Research Centre Siddapur (Uttara Kannadadistrict) Karnataka-581355
2. Professor And Hod Department Of Post Graduate Studies In Kayachikitsa Dhanvantari Ayurveda College, Hospital& PG Research Centre Siddapur (Uttara Kannadadistrict) Karnataka-581355 .

Article Info

Article history:

Received on: 12-10-2021

Accepted on: 19-11-2021

Available online: 30-11-2021

Corresponding author-

Veena C.S, Dhanvantari Ayurveda College, Hospital& PG Research Centre Siddapur (Uttara Kannadadistrict) Karnataka-581355.

Email-bappujiayurveda@gmail.com

ABSTRACT:

A single blind controlled comparative clinical study with pre test and post test design to evaluate the therapeutic efficacy of *Shiva Guggulu* and *Vatari Guggulu* in the management of *Gridhrasi*. The study carried out at Dhanvantari Ayurveda medical college Hospital; Siddapur, Uttara Karnataka. 40 patients suffering from *Gridhrasi* / *SCIATICA* of either sex were selected for the study were treated under two groups; A and B. Group A with oral administration of *Shiva Guggulu*, in a dose of 500 mg after food twice a day with *sukhoshna jala* as *anupana* and the same is continued for 30 days. Group B with oral administration of *Vatari Guggulu*, in a dose of 500 mg after food twice a day with *sukhoshna jala* as *anupana* for 30 days. The response following the intervention was assessed on 1st, 15th, 21st, and 30th days to find out the progress of the Condition in both the groups. Final conclusion of this controlled comparative clinical study says Group A is more effective than Group B (*Shiva guggulu* is more effective than *Vatari guggulu*) in the management of *Gridhrasi*.

Key Word: *Gridhrasi, Vatari guggulu, Shiva guggulu, Sciatica.*

INTRODUCTION

At present, the lifestyle is gradually shifting from healthy living and therefore people fall victim of various diseases, sedentary lifestyle, stress, improper posture, continuous movements, long travelling etc. *Gridhrasi* is a condition characterized by pain starts from *Kati* and radiates down to *Pristha, Uru, Janu, Jangha* and *Pada* respectively, which resembles sciatica disease. It is a crippling disease with pain in the hip referred down to the leg and foot through sciatic nerve. Sciatica is a relatively common condition

with a lifetime incidence varying from 13% to 40%. The corresponding annual incidence of an episode of sciatica ranges from 1% to 5%. Putting maximum pressure on the spine and lower portion of the pelvis, about 80 – 90 % of people get affected by low back pain and 5% of those victims of sciatica.^[1] The disease name itself is suggestive of typical gait of the patient which resembles with bird vulture leg movements. It affects daily routines of victims' life as it restricts the leg movement. Trauma on lumbosacral area (*Abhighata*), postural defects,



This work is licensed under a CC BY 4.0 License

overloading, abrupt unbalanced movements, continuous jerky movements, and sedentary lifestyles as well as psychological factors (*chinta, shoka* etc.) are considered as causative factor of sciatica disease. So if not treated in time by experienced hand, then it will leads to many complications.

In modern medicine Sciatic pain is generally managed by using anti- inflammatory drugs, muscle relaxants, traction and even with surgical intervention. As far as treatment of the disease sciatica is concerned, use of analgesics and physiotherapy will help to certain extent, but there is no ultimate cure and chances of reoccurrence as well. Ayurveda offers ample of better options in the management of this painful disorder, so far in the treatment of *gridhrasi*, drug of choice should have *vata shamaka, kapha shamaka, vatanulomaka, dipana – pacana* (digestive – carminative) and *shoola prasamana* properties. So the present study entitled “A Controlled And Comparative Study On *Vatari Guggulu* And *Shiva Guggulu* In The Treatment Of *Gridhrasi* “was carried out with an aim to explore the therapeutic effect of *Shiva Guggulu*^{1 2)} and *Vatari Guggulu*³ in the management of *Gridhrasi*. The *shiva guggulu* which is explained in *Rasendra Sara Sanghraha* {2/17-20} having ingredients *Thriphala, ErandaTaila, Guggulu, Gandhaka, Rasna, Vidanga, Maricha, Dantimoola, Jatamansi, Nagara* And *Devadaru* is selected as the trial drug for the study. They had *Shoolahara, Sothahara, Vathakaphahara, Vathanulomaka Sandhanakara, Deepana – Pachana* and *Balya* properties. All this summarizes the *samprapti vightana* and *vyadhi prathanika chikitsa* .The palatability and easy administration of the medicine along with easy availability of raw drugs and low cost of production is an added benefit of *shiva guggulu*. The *Vatari Guggulu* – explained in *Bhaishajya Ratnavali* {29/149 to 151} is taken as the standard drug for this controlled comparative study to evaluate the efficacy of *shiva guggulu* in *Gridhrasi* management.

METHODOLOGY

Aims and Objective of the study:-

1. To evaluate the effect of *Shiva Guggulu* in the management of *Gridhrasi*.
2. To evaluate the effect of *Vatari Guggulu* in the management of *Gridhrasi*.
3. To compare the efficacy of *Shiva Guggulu* and *Vatari Guggulu* in the management of *Gridhrasi*.

The evaluation was done based on the changes in the parameters observed before and after treatment.

Hypothesis:-

1. **H₀**:-*Vatari Guggulu* and *Shiva Guggulu* are equally effective in the management of *Gridhrasi*.
2. **H₁**:- *Shiva Guggulu* is more effective than *Vatari Guggulu* in the management of *Gridhrasi*.
3. **H₂**:- *Vatari Guggulu* is more effective than *Shiva Guggulu* in the management of *Gridhrasi*.

Source of data:-

Patients attending the Kayachikitsa OPD and IPD of Dhanvantari Ayurveda college hospital, Siddapur were screened for *Gridhrasi roga*.

Literary source:-

Literary aspects of study were collected from classical Ayurvedic and Modern texts, updated with recent journals.

Selection criteria: - The patients were selected based on the inclusion and exclusion criteria.

Inclusion criteria:-

1. Patients of either sex with irrespective of chronicity are selected
2. Patients with *Prathyama Lakshana* of *Gridhrasi*.
3. Patients between the age group of 16 to 60 years.
4. Patients having positive physical signs of radicular pain of Sciatica.
5. Treated and untreated cases will be taken for the study.

Exclusion criteria:-

The patients suffering from *Gridhrasi* caused due to the following were excluded from the study.

1. Neoplastic conditions of spine
2. Trauma of spine
3. Infections of spine
4. Congenital deformities

Criteria of Diagnosis:-

Diagnosis is made on the basis of classical symptoms of *Gridhrasi*. Presence of prominent feature of *Gridhrasi* is

1. *Stambha*
2. *Ruk*
3. *Toda*
4. *Spandana*
5. *Aruchi*
6. *Tandra*
7. *Gaurava*

STUDY DESIGN: -

TYPE OF STUDY:-The present study is Randomized Controlled Comparative Clinical study.

Research design: - 40 diagnosed patients of *Gridhrasi*, fulfilling inclusion and exclusion criteria were taken for the study and randomly divided in to two groups A and B (Table 1, Table 2)

Randomization and blinding:- This is a single blind study where the patients were randomly assigned to both the groups in random order to avoid bias.

The patients selected for the trial were listed in sequential order from number 1 to 40. the patients who were allocated the serial numbers 1 to 20 were assigned to group A and the patients who were allocated the serial numbers 20 to 40 were assigned to group B.

Observation period:- Patients were reviewed on 1st, 15th and 30th days to assess the progress of the Condition in both the groups.

Follow up:- 30 days after the course of treatment

Total study Duration: - Thirty days.

Ethical committee clearance:-IEC/DACH/DATE-21/03/2019

Patient consent:-Before commencement of treatment the patient was informed about the purpose of clinical evaluation and nature of the drug treatment. The consent of patient was taken in a consent form (format of the consent form is enclosed).

Data collection: - A comprehensive case record for all the patients was maintained as per the case proforma (proforma prototype enclosed). A detailed history was taken and complete clinical examination of all the patients was done before and after treatment. Baseline and post-intervention values of the assessment parameters were systematically recorded. The obtained data was tabulated in the master chart and later subjected to statistical analysis.

DRUG SOURCE

Authentic raw drugs required for the preparation of *SHIVA GUGGULU* and *VATARI GUGGULU* was procured from local areas and market. The required medicines were prepared at the pharmacy of *Dhanvantari* ayurvedic college, Siddapur as per classical methods.

Preparation Of The Trial Drug *SHIVA GUGGULU* (Table 1)

Method of Preparation:-

4 *palas* each of *haritaki*, *vibhitaki* and *amalaki* are mixed with about 3 litres of water and cooked to prepare the *quatha* reduced to 1/4th. In this 2 *palas* each of *eranda taila*

and *shodita guggulu* and 3 *tolas* of *shodita gandhaka* are added and cooked. When it is semisolid 1 *kola* each of the powders of *rasna*, *vidanga*, *maricha*, *dantimoola*, *jatamansi*, *nagara*, *devadaru* are mixed well and pills are rolled.

Preparation Of Standard Drug *VATARI GUGGULU*:- (Table 2)

Method of Preparation:-

Shudha Guggulu is made soft by adding *Eranda thaila*. Powders of other drugs are added and mixed well. This is made into tablet form of 500mg.

Method Of Administration Of Drug And Posology:-

Group A - *Shiva guggulu* given in a dose of 500 mg twice daily (morning and evening) after food, *anupana* as *sukoshna jala* for a period of 30 days.

Group B- *Vatari guggulu* given in a dose of 500 mg twice daily (morning and evening) after food, *anupana* as *sukoshna jala* for a period of 30 days.

ASSESSMENT CRITERIA:-

The Symptoms of *GRIDHRASI* in classical text are taken as assessing parameters.

Stambha

Ruk

Toda

Spandana

Aruchi

Tandra

Gourava

RESULTS:

Considering the overall changes seen in the assessment parameters the total effect of the treatment was assessed as follows-

Complete remission	relief of 100% of sign & symptoms
Marked improvement	relief of >60%
Moderate improvement	50% to 60% relief
Mild improvement	40% to 50% of relief
No Change	<40 % relief

P < 0.001 is considered as Highly Significant

P < 0.05 is considered as Statistically Significant

P > 0.05 is considered as Not Significant.

Demographic data analysis

Age Wise Analysis- In age wise analysis all patients were in the range of 16 – 60 years 50% were of 16-30 age group, 15 patients i.e. 37.5% were of 46-60 age group, 05 patients i.e. 12.5% were of 31-45 years.

Sex Wise Analysis-Sex wise distribution shows 70%

patients was Female and 30% patients were Male.

Religion Wise Analysis- Religion wise analysis shows that maximum no. of patients i 90 % patients were Hindus and 02 patients i.e. 5% were Muslims and 02 patients i.e. 05% patients were Christians

Marital Status Wise Analysis- Marital statuses wise distribution shows that maximum no. of patients were i.e. 55% were Married and 18patients i.e.45% were Unmarried.

Socio Economic Status Wise Analysis- Socio-Economic wise distribution shows maximum no. of patients were 67.5% were belongs to middle class.

Deha Prakriti Wise Analysis - *Deha Prakriti* wise distribution shows that maximum no. of patients i.e 60% belonged to Vata pitta Prakriti, 40% belonged to *vata kapha Prakriti*.

Manasa Prakriti Wise Analysis- *Manasa Prakriti* wise distribution shows maximum no. patients' i.e 70% belonged to Rajasika Prakriti, 30% belonged to Tamasika Prakriti.

Rasa Dominance Wise Analysis- Maximum patients were using *Katu rasa* i.e. 14 (46.67%) followed by *Amla rasa* 12 (40%). Affinity for *Lavana* was 3 (10%) and only one patient was using *Madhura rasa*.

Diet Wise Analysis- shows that maximum no. of patients 70% consumed mixed diet, and 30% were Vegetarian.

Dietary Habit Wise Analysis- shows maximum no. of patients 40% were following *Samashana*, 17.5% were following *Adhyashana*, 42.5% were following *Vishamashana*.

Occupation Wise Analysis- . Occupation Wise Analysis- Occupation wise distribution shows maximum no. of patients 92.5% were Active and 03patients i.e.7.5 % were Sedentary.

Agni Wise Analysis- Agni wise distribution shows maximum no. of patient 70% had *Mandagni*, 30% were having *Vishmagni*. *Koshta* wise 5% were *Madhyama*, 10% were *Mrudu koshta*, 85% were *Kroora koshta*.

Addiction Wise Analysis- Addiction wise distribution shows 85% patients were devoid of any habits.10% patients had the habit of Smoking, 05% patients had the habit of using Tobacco, 2.5% patients had the habit of Alcohol.

Vihara Satmya Wise Analysis- maximum no. of patients i.e 45% were having *Divasvapna* vihara satmya followed by 22.5% patients were having *Vyayama satmya* and 32.5% patients were having no vihara satmya.

Satmya Wise Analysis - 17.5% had *Avara Satmya*, 82.5% *Madhyama Satmya*.

Satwa Wise Analysis -77.5% had *Madhyama Satwa*, 22.5% had *Avara Satwa*.

Sara Wise Analysis- Sara Wise Distribution shows that 80% were having *Madhyama Sara* 12.5% were having *Pravara Sara*, ,7.5% were having *Avara Sara*.

Samhanana Wise Analysis-Samhanana Wise Distribution shows that 80% had *Madhyama Samhanana*, 20% had *Avara samhanatha*.

Vyayama Shakti Wise Analysis- 00% had *Pravara Vyayama Shakti*, 40% had *Madhyama Vyayama Shakti* and 60% had *Avara Vyayama Shakti*.

Chronicity Wise Analysis -45 % patients were in the range of 1 to 3 years duration. 42.5 % patients were of 12 months duration, 7.5 % showed duration of 4 to 6 years, and 25 % patient showed duration above 9 years.

Treatment history Wise Analysis- 82.5 % had received Allopathic treatment, 12.5 % had received Ayurvedic treatment, 5% patient had received other treatment such as acupuncture etc.

According to patient leg side affected analysis- Radiation of pain was seen in 52.5 % patients in right lower limb and 47.5% had radiation in left lower limb. No patients reported with bilateral involvement.

Statistical Analysis

Analysis of effect of the treatment was done statistically by calculating the mean, standard deviation, standard error, t-value, by paired t test and unpaired t test.

Statistical Analysis of parameters of both groups based on paired t test (Table 3, table 4)

Effect on *Stambha*:

In group A, statistical analysis revealed that the mean which was 2.45 before treatment was reduced to 0.20 with 91.83 % improvement. This change is statistically highly significant ($P < 0.0001$). In group B, statistical analysis revealed that the mean which was 2.25 before treatment was reduced to 0.10 after treatment with 95.55% relief. This change is statistically highly significant ($P < 0.0001$).

Effect on *Ruk*

In group A, statistical analysis revealed that the mean which was 1.85 before treatment was reduced to 0.20 with 89.18 % improvement. This change is statistically highly significant ($P < 0.0001$). In group B, statistical analysis revealed that the mean which was 1.65 before treatment was reduced to 0.50 after treatment with 69.69% relief.

This change is statistically highly significant ($P < 0.0001$).

Effect on *Toda*

In group A, statistical analysis revealed that the mean which was 1.50 before treatment was reduced to 0.00 with 100 % improvement. This change is statistically highly significant ($P < 0.0001$). In group B, statistical analysis revealed that the mean which was 1.50 before treatment was reduced to 0.10 after treatment with 93.33% relief. This change is statistically highly significant ($P < 0.0001$).

Effect on *Spandana*

In group A, statistical analysis revealed that the mean which was 1.55 before treatment was reduced to 0.05 with 96.77 % improvement. This change is statistically highly significant ($P < 0.0001$). In group B, statistical analysis revealed that the mean which was 1.50 before treatment was reduced to 0.35 after treatment with 76.66% relief. This change is statistically highly significant ($P < 0.0001$).

Effect on *Tandra*

In group A, statistical analysis revealed that the mean which was 2.20 before treatment was reduced to 0.10 with 95.45 % improvement. This change is statistically highly significant ($P < 0.0001$). In group B, statistical analysis revealed that the mean which was 1.85 before treatment was reduced to 0.50 after treatment with 72.97% relief. This change is statistically highly significant ($P < 0.0001$).

Effect on *Aruchi*

In group A, statistical analysis revealed that the mean which was 1.10 before treatment was reduced to 0.00 with 100 % improvement. This change is statistically highly significant ($P < 0.0001$). In group B, statistical analysis revealed that the mean which was 1.00 before treatment was reduced to 0.00 after treatment with 100% relief. This change is statistically highly significant ($P < 0.0001$).

Effect on *Gourava*

In group A, statistical analysis revealed that the mean which was 1.30 before treatment was reduced to 0.00 with 100 % improvement. This change is statistically highly significant ($P < 0.0001$). In group B, statistical analysis revealed that the mean which was 1.10 before treatment was reduced to 0.00 after treatment with 100% relief. This change is statistically highly significant ($P < 0.0001$).

Statistical Interpretation: Based on the results obtained by Paired t test the following observations can be made,

Group A: Of the 07 parameters, changes recorded in 07 parameters were highly significant.

Group B: Of the 07 parameters, changes recorded in 07 parameters were highly significant.

Hence, based on the Paired t test it is evident that the

overall changes were more significant in Group A in comparison to Group B.

Statistical Analysis of parameters of both groups based on Unpaired t test[table 5]

Stambha: Both groups showed significant decrease in *stambha*. Mean difference in Group A was 2.25 while it was 2.15 in Group B.

Though there appears a considerable difference in the mean difference, on statistical analysis using unpaired t test the difference between the two groups is not significant ($P > 0.05$).

Ruk: Both groups showed significant decrease in *Ruk*. Mean difference in Group A was 1.65 while it was 1.15 in Group B. Though there appears a considerable difference in the mean difference, on statistical analysis using unpaired t test the difference between the two groups is statistically significant ($P < 0.05$).

Toda: Both groups showed significant decrease in *Toda*. Mean difference in Group A was 1.50 while it was 1.40 in Group B. Though there appears a considerable difference in the mean difference, on statistical analysis using unpaired t test the difference between the two groups is not significant ($P > 0.05$).

Spandana: Both groups showed significant decrease in *Spandana*. Mean difference in Group A was 1.50 while it was 1.15 in Group B. Though there appears a considerable difference in the mean difference, on statistical analysis using unpaired t test the difference between the two groups is statistically significant ($P < 0.05$).

Tandra: Both groups showed significant decrease in *Tandra*. Mean difference in Group A was 2.10 while it was 1.35 in Group B. Though there appears a considerable difference in the mean difference, on statistical analysis using unpaired t test the difference between the two groups is highly significant ($P < 0.0001$).

Aruchi: Both groups showed significant decrease in *Aruchi*. Mean difference in Group A was 1.10 while it was 1.00 in Group B.

Though there appears a considerable difference in the mean difference, on statistical analysis using unpaired t test the difference between the two groups is not significant ($P > 0.05$).

Gourava: Both groups showed significant decrease in *Gourava*. Mean difference in Group A was 1.30 while it was 1.10 in Group B. Though there appears a considerable difference in the mean difference, on statistical analysis using unpaired t test the difference between the two groups is not significant ($P > 0.05$).

Statistical interpretation:

Based on the results obtained from unpaired t test the overall improvements seen in Group A (*shiva guggulu*) are more significant than that of Group B (*vatari guggulu*).

DISCUSSION

Discussion on Review of Literature-

As the science advanced in *Samhita Kala*, *Charaka Samhita* was the first and foremost treatise which elaborates *Vata*, *Vatavyadhi* and *Gridhrasi* in full length.^[4,5,6,7] *Sushruta* has given much importance by allotting first chapter of *Nidana Sthana* itself for *Vatavyadhi*, even though he describes the clinical features of *Gridhrasi* in the same chapter^[8], but varieties of *Gridhrasi* were not found, he had made many original observation pertaining to *Sandhimukta*, his description pertaining to classification, clinical features, prognosis of *Sandhimukta*^[9] suits for lumbar disc prolapse which is responsible for majority of Sciatica cases. The descriptions of *Vata* in its normal and morbid state in *Bhela Samhita*[BH-SH-7/8] were almost analogous to *Charaka*. The treatment pertaining to *gridhrasi* described sum what different from his previous works. He stresses the use of *Bala Tila* for *Vasti*, *Pana*, etc., in addition to *Raktamokshana*. The treatment of *Gridhrasi* is explained Immediately after describing *Rakta Gata Vata Chikitsa*. This indicates its association with *Pitta*. *Harita* was the first to give importance to *Gridhrasi* by naming 22nd chapter of *Triteeya Sthana* as *Gridhrasi Chikitsadhyaya*, who mentions *Gridhrasi* is a disorder due to impaired function of *Vyana Vayu*, he had high lightened use of *Rasona*, *Guggulu* and *Bala* in the treatment of *Vata Vyadhi*. He has allotted separate chapter for *Rasona Kalpa*, *Guggulu Kalpa* in *Kalpa Sthana*.

Vridha Vagbhata has given place for *Vata Vyadhi* in both *Nidana* and *Chikitsa Sthana* Similar to *Sushruta*.^[10,11] He mentioned *Gridhrasi* in the disorders of *Vata* seated at *Snayu*^[12,13].

Madhavakara describes the varieties of *Gridhrasi* i.e. *Vataja* and *Vata Kaphaja* more elaborately than *Charaka*, Exhibiting his specialisation of *Nidana* which facilitates appropriate diagnosis.

It was an interesting comment made by *Arunadatta* in his *Sarvanga Sundari* Commentary on *Ashtanga Hridaya* defines clearly that due to *Vata* in *Kandara* the pain is produced at the time of raising the leg straight and

it restricts the movement of thigh. This is an important clinical test now days for the diagnosis of sciatica known as SLR test. *Sodhala* the author of *Gadanigraha* was the first person to point at the necessity of *Rakta Dushtihara* therapies in *Vata Roga*, when usual measures failed to achieve desired result.

Dalhana gives a clear idea about the anatomical location of *Gridhrasi* that is he considered *Gridhrasi Nadi* as *Kandara* stated by *Sushruta*. He has mentioned it as *Maha Snayu* which runs from Lumbar region to the foot, he terms *Gridhrasi* as *Randhani* which means weak point or Rapture.

Adhamalla the commentator on *Sarangadhara samhita* stated that the *Gridhrasi* is popularly known *Radhi* indicates pressuring, Compressing & Destroying.

The treatment of a disease varies accordingly to the morbid state of *dosha* in the body, *Bala*, *Prakriti* etc., of the patient. If the *Dosha Prokopa* is minimum, *Langhana Chikitsa* and if *Dosha Prokopa* is maximum *Shodhana* therapy should be adopted^[14,15]. There is a general principle that *Vridhi of Dosha* should be treated by *Langhana* and their *Kshaya* with *Tarpana*^[16]. But *Vata* is an exception as *Vata Vridhi* is to be treated by *Tarpana* and *Kshaya* by *Langhana*^[17].

While treating any disease, the first and foremost principle to be followed is to avoid *Nidana*^[18]. For *Gridhrasi*, all the *Vata Prakopa Hetu* including external factors such as excessive walking, riding etc should be avoided. *Gridhrasi* being a *Vatavyadhi* the general line of treatment of *Vatavyadhi* can apply to it^[19].

When we review the classics about the therapeutic aspect of *Gridhrasi*, it revolves around effects like *Amapachana*, *Vedana Sthapana*, *Deepana*, *Vata Shamana*, *Balya* and *Rasayana*.

Probable mode of action of *Shiva Guggulu*

The drugs which comprise *Shiva Guggulu* can be categorized according to their karma, as follows.

<u>Drug</u>	<u>Property</u>
-------------	-----------------

- | | |
|----|--|
| 1) | <i>Harithaki</i> -- <i>Shoolahara</i> , <i>Anulomaka</i> , <i>Agnivardaka</i>
<i>Tridosha Shamaka</i> |
| 2) | <i>Vibithaki</i> -- <i>Sothahara</i> , <i>Tridosha Shamaka</i> |
| 3) | <i>Amlaki</i> --- <i>Tridosha Shamaka</i> , <i>Rasayana</i> |
| 4) | <i>Eranda</i> <i>Thailla</i> --- <i>Katishoola</i> , <i>Asthishoola</i> <i>Hara</i> ,
<i>Anulomaka</i> , <i>Vatakaphahara</i> |

- 5) *Gandhaka-- Dipana, Pachana, Sara, Balya, Yogavahi.*
- 6) *Guggulu--Sukshma, Rasayana,Bagnasandhanakara*
- 7) *Rasna--Vata Kapha Shamaka, Shoolahara*
- 8) *Vidanga--- Vata Kapha Shamaka Agnivardaka*
- 9) *Maricha--- Agnivardaka ,Shoolahara, Vata Kapha Shamaka*
- 10) *Danti Moola-- Shoolahara Sothahara, Dipana, Pachana,Vatahara, Virechaka,Ashukari*
- 11) *Jatamansi-- Tridosha Shamaka*
- 12) *Nagara- -Agnivardaka ,Shoolahara, Vata Kapha Shamaka*
- 13) *Devadaru-- Vatavikara , Vibhanda , Vata Kapha Shamaka*

When we consider *Samprapti of Gridhrasi* due to *Apatarpana* or *Abhigata* where *Vata Prakopa* takes place due to *Riktata of Srotas* or damage to vital points leading to *sandhichyuta* and *Vata Prakopa*. Here along with *Deepana Pachana* properties, the drugs like *Guggulu, Eranda ,Amlaki Devadaru* having *Rasayana* and *Balya ,Bagnasandhanakara* property. That replaces the damaged nerve tissue.

Rasna, Nagara,Eranda,Maricha,Danthi acts as *Vedana Sthapana* and *Vata Shamaka*. *Shunti, Maricha,Danthi* acts as *Shothahara*. *Saraguna of Guggulu and Amlaki ; Snigdha guna of Devadharu,Eranda* enables flexibility to joints and muscles involved(*kandaras*)

By the virtue of all these fills the *Rikta Srotas* and brings *Mardavata* thus leads to proper canalisation of *Vata* and disintegrating the *Samprapti*.

The *Rasapanchaka* of *shiva guggulu* are *Kashaya-madhura-katu rasa. Laghu-Rooksha –Snigdha-Sara guna yuktha. Madhura vipaka and katu vipaka (50% each) . Ushna veerya pradhana* and *vata kapha shamaka*.

According to these *Rasa, Guna, Veerya, Vipaka* the *Shiva guggulu* can act as *Vata kapha Shamaka, Shoolahara, Sothahara, Vatanulomaka, Agnideepana, balya* and *Rasayana* in *Gridhrasi samprapti Vighatana*.

The *Vatari guggulu* – *Rasapanchaka* are as follows *Katu- Kashaya-Madhura-Tikta Rasa* predominant. *Laghu* and *Rooksha guna* predominant; with *Guru, Teekshna* and *Sara guna. Madhura vipaka* and *Ushna veerya pradhana. Tridosha shamaka* and *vata kapha shamaka in doshagnatha*.

Act as *deepana pachana, sothahara; shoolahara* in general and specifically *katishoola* and *asthishoola hara*. The *Bagnahara* and *sandhanakara* property along

with *balya* action strengthen the vertebra and heals the trauma at *asthi* level.

CONCLUSION

As per detailed analysis and observations noted in this study, following conclusions can be drawn. *Sciatica* which is well explained in modern medicine can be well equated with *Gridhrasi* told in Ayurvedic classics in the aspects of etiology, etio-pathogenesis, clinical manifestation and treatment. *Gridhrasi* affects invariably patients of any age with higher incidences in females than in males. Married people were more reported with *sciatica (Gridhrasi)* due to their excessive physical strain. Irregular dietary habits and mixed diet have significance in gradual onset of *Gridhrasi*. Most of the sciatic patients had gradual onset of the symptoms. Chronicity showed 1- 3 years of duration in maximum patients. *Gridhrasi* is a *Vata pradhana Vyadhi* with the involvement of *Pitta* and *Kapha Dosha*. *Vata Pitta Prakriti* persons are more affected than *Vata Kaphaja* persons. *Vatakara Ahara Vihara* has a major role in the causation of *Gridhrasi*. *Mandagni* and *Krura Koshta* were observed in most of the patients of *Gridhrasi*. Management of *Gridhrasi (Sciatica)* with *Shiva guggulu* and *Vatari Guggulu* showed good result in the subjective and objective parameters of the present study. Marked reduction in the mean score of outcome measures – *Stambha, Ruk, Toda Spandana, Aruchi, Tandra, and Gourava* are recorded and are statistically highly significant. To make proper *Samprapti Vighatana* the drugs should have following properties *Deepana – Pachana, Vedana Sthapana* (acting at centre & local) *Shothahara ,Balya* (acts on *Manas & Shareera*), *Rasayana*. The *Shiva guggulu* are *Kashaya-madhura-katu rasa; Laghu-Rooksha –Snigdha-Sara guna yuktha; Madhura vipaka and katu vipaka (50% each), Ushna veerya pradhana* and *vata kapha shamaka*. According to these *Rasa, Guna, Veerya, Vipaka* the *Shiva guggulu* can act as *Vata kapha Shamaka, Shoolahara, Sothahara, and Vatanulomaka, Agni deepana, balya* and *Rasayana* in *Gridhrasi samprapti Vighatana*. The *Vatari guggulu* is *Katu-Kashaya-Madhura-Tikta Rasa* predominant; *Laghu* and *Rooksha guna* predominant; with *Guru, Teekshna* and *Sara guna yuktha; Madhura vipaka* and *Ushna veerya pradhana; Tridosha shamaka* and *vata kapha shamaka in doshagnatha*. *Vatari guggulu* act as *deepana pachana, sothahara; shoolahara* in general and

specifically *katishoola* and *asthishoola hara*. Compare to *Vatari guggulu*, *Shiva guggulu* seems to provide better relief (%) in, *Ruk*, *Toda Spandana*, *Aruchi*, *Tandra*, and *Gourava*; whereas *Vatari guggulu* shows better relief % in *Stambha*. Both the groups seem to be showing high Statistical Significance ($P<0.001$) on intensity on cardinal sign and symptoms, and mean wise better improvement by using Paired 't' test.

Tandra showing statistically high significant ($P<0.001$) and *Ruk* and *Spandana* are showing statistically significance ($P<0.05$) by using unpaired t-test. Thus, we can conclude that Group A *Shiva guggulu* is more effective than Group-B *Vatari guggulu* in the management of *Gridhrasi*.

Acknowledgment: Nil.

Financial Support: Nil.

Conflict of Interest: Nil

REFERENCES

1. J, Lumbar disc disease: epidemiology, *Instr Course Lect*, 1992, vol. 41 (pg. 217-23) Google Scholar. *N Engl, J Med*, 1988, vol. 318 (pg. 291-300) Google Scholar Cross ref PubMed.
2. Tripathi I, Rasendra sara sangraha, chauhambha orientalia, amavata chikitsa adhyaya, 2nd chapter, sloka no 18, 20 edition 2006. pp. 355.
3. Mishra S, Bhaishajya ratnavali, 29 Chapter/Shloka no 149-151, *Choukamba surbharati Prakashan* 2016. pp. 607.
4. *Trikamji J, Charaka Samhita*, Of *Agnivesa*, Revised By *Charaka And Dridhabala With Ayurveda Deepika Commentary Of Chakrapanidatta*, Ch. Sutra Sthana- 5/90-92 Choukambha Publications New Delhi. 2017. pp. 40-41.
5. *Trikamji J, Charaka Samhita*, Of *Agnivesa*, Revised By *Charaka And Dridhabala With Ayurveda Deepika Commentary Of Chakrapanidatta*, Ch. Sutra Sthana- 14/20-24 Choukambha Publications New Delhi. 2017. pp. 89.
6. *Trikamji J, Charaka Samhita*, Of *Agnivesa*, Revised By *Charaka And Dridhabala With Ayurveda Deepika Commentary Of Chakrapanidatta*, Ch. Sutra Sthana- 19/7 Choukambha Publications New Delhi. 2017. pp. 112.
7. *Trikamji J, Charaka Samhita*, Of *Agnivesa*, Revised By *Charaka And Dridhabala With Ayurveda Deepika Commentary Of Chakrapanidatta*, Ch. Sutra Sthana- 20/11 Choukambha Publications New Delhi. 2017. pp. 113.
8. *Trikamji J Sushruta Samhita*, With *Nibhandha Sangraha Commentary By Dalhana, Susrutha Nidana Sthana* 1/74 Varanasi: *Choukamba Sanskrit Sansthan*; 2005 .pp. 268.
9. *Trikamji J Sushruta Samhita*, With *Nibhandha Sangraha Commentary By Dalhana, Susrutha chikitsa Sthana* 5/23; Varanasi: *Choukamba Sanskrit Sansthan*; 2005 .pp. 427.
10. *Gupta A Vaghbatacharya; Astanga Sangraha* with Hindi *Vyakhya nidana sthana*. 15/56, published by *Krishnadas academy Varanasi*, Reprinted edition, 1993. pp. 285.
11. *Sastri H.S Paradakara* Edited, *Ashtanga Hridaya Of Vagbhata With Sarvanga Sundara Commentary Of Aruna Datta And Ayurveda Rasayana Commentary Of Hemadri nidana Sthana*- 15/54 Reprint Edition *Choukambha Sanskrit Sansthan*, Varanasi; 2005. pp. 535.
12. *Trikamji J, Charaka Samhita*, Of *Agnivesa*, Revised By *Charaka And Dridhabala With Ayurveda Deepika Commentary Of Chakrapanidatta*, Ch. *chikitsa Sthana*- 28/56, Choukambha Publications New Delhi. 2017. pp. 619
13. *Trikamji J Sushruta Samhita*, With *Nibhandha Sangraha Commentary By Dalhana, Susrutha Nidana Sthana* 1/74 Varanasi: *Choukamba Sanskrit Sansthan*; 2005. pp. 268.
14. *Gupta A Vaghbatacharya; Astanga Sangraha* with Hindi *Vyakhya nidana sthana*. 16/56, published by *Krishnadas academy Varanasi*, Reprinted edition, 1993. pp. 294.
15. *Gupta A Vaghbatacharya; Astanga Sangraha* with Hindi *Vyakhya nidana sthana*. 15/54, published by *Krishnadas academy Varanasi*, Reprinted edition, 1993. pp. 535.
16. *Trikamji J, Charaka Samhita*, Of *Agnivesa*, Revised By *Charaka And Dridhabala With Ayurveda Deepika Commentary Of Chakrapanidatta*, Ch. *vimana Sthana* - 3/43 Choukambha Publications New Delhi. 2017. pp. 246.
17. *Gupta A Vaghbatacharya; Astanga Sangraha* with Hindi *Vyakhya sutra Sthana*. 11/26, published by *Krishnadas academy Varanasi*, Reprinted edition, 1993. pp. 186.
18. *Trikamji J Sushruta Samhita*, With *Nibhandha Sangraha Commentary By Dalhana, Susrutha utara tantra* 1/25 Varanasi: *Choukamba Sanskrit Sansthan*; 2005 .pp 297.
19. *Trikamji J, Charaka Samhita*, Of *Agnivesa*, Revised By *Charaka And Dridhabala With Ayurveda Deepika Commentary Of Chakrapanidatta*, Ch. Sutra Sthana- 20/13 Choukambha Publications New Delhi. 2017. pp. 114.

How to cite this article: Veena C.S., Bhat R "A Controlled And Comparative Study On *Vatari Guggulu* And *Shiva Guggulu* In The Treatment Of *Gridhrasi*." IRJAY. [online] 2021; 4(11); 38-48. Available from: <https://irjay.com>; Doi:- <https://doi.org/10.47223/IRJAY.2021.41106>

Table-1 Shows Ingredients of SHIVA GUGGULU

S.NO	NAME OF PLANT	BOTONICAL NAME	PROPORTION
1	<i>Harithaki</i>	<i>Terminalia Chebula retz</i>	4 pala
2	<i>Vibithaki</i>	<i>Terminalia bellarica roxb</i>	4 pala
3	<i>Amalaki</i>	<i>Emblica officinalis gaertn</i>	4 pala
4	Water		1 adhaka
5	<i>Eranda thaila</i>	<i>Ricinus communis linn</i>	2 pala
6	<i>Guggulu</i>	<i>Commiphora mukul</i>	2 pala
7	<i>Gandhaka</i>	Sulphur	3 tolas / karsha
8	<i>Rasna</i>	<i>Pluchea lanceolata</i>	1 kola
9	<i>Vidanga</i>	<i>Embelia ribs</i>	1 kola
10	<i>Maricha</i>	<i>Piper nigrum</i>	1 kola
11	<i>Danti moola</i>	<i>Baliospermum montanum</i>	1 kola
12	<i>Jatamansi</i>	<i>Nardostachys jatamansi</i>	1 kola
13	<i>Nagara</i>	<i>Zingiber officinale</i>	1 kola
14	<i>Devadaru</i>	<i>Cedrus deodara</i>	1 kola

Table 2 Shows Ingredients VATARI GUGGULU:

S No	Name of Plant	Botanical Name	Part used	Proportion
1	<i>Eranda</i>	<i>Ricinus communis linn</i>	<i>Thaila</i>	420ml
2	<i>Gandhaka</i>	Sulphur		420gm
3	<i>Guggulu</i>	<i>Commiphora mukul engl</i>	Resin	420gm
4	<i>Haritaki</i>	<i>Terminalia chebula retz</i>	Fruit	420gm
5	<i>Vibhitaki</i>	<i>Terminalia bellirica roxb</i>	Fruit	420gm
6	<i>Amalaki</i>	<i>Emblica officinalis gaertn</i>	Fruit	420gm

Table No. 3 Showing Comparison between the post treatment results of both groups

Parameter	Group A	Group B
<i>Stambha</i>	91.83%	95.55%
<i>Ruk</i>	89.18%	69.69%
<i>Toda</i>	100%	93.33%
<i>Spandana</i>	96.77%	76.66%
<i>Tandra</i>	95.45%	72.97%
<i>Aruchi</i>	100%	100%
<i>Gourava</i>	100%	100%

Table No 4. Showing the Statistical analysis of Group A after treatment.

Parameters	MEAN		MD	Reduction %	SD	SE	DF	t VALUE	P VALUE	REMARKS
	BT	AT								
<i>STAMBHA</i>	2.45	0.2	2.25	91.83	0.72	0.16	19	14.047	<0.001	HS
<i>RUK</i>	1.85	0.2	1.65	89.18	0.49	0.11	19	15.079	<0.001	HS
<i>TODA</i>	1.5	0.00	1.5	100	0.61	0.14	19	11.052	<0.001	HS
<i>SPANDANA</i>	1.55	0.05	1.5	96.77	0.69	0.15	19	9.747	<0.001	HS
<i>TANDRA</i>	2.20	0.1	2.1	95.45	0.55	0.12	19	16.998	<0.001	HS
<i>ARUCHI</i>	1.1	0.00	1.1	100	0.64	0.14	19	7.678	<0.001	HS
<i>GOURAVA</i>	1.3	0.00	1.3	100	1.03	0.23	19	5.638	<0.001	HS

*HS – Highly Significant, SS –Statistically Significant, NS – Not Significant

Table No. 5 Showing the Statistical analysis of Group B after treatment

Parameters	MEAN		MD	Reduction %	SD	SE	DF	t VALUE	P VALUE	REMARKS
	BT	AT								
<i>STAMBHA</i>	2.25	0.10	2.15	95.55	0.75	0.17	19	12.903	<0.001	HS
<i>RUK</i>	1.65	0.50	1.15	69.69	0.75	0.17	19	6.902	<0.001	HS
<i>TODA</i>	1.5	0.1	1.40	93.33	0.68	0.15	19	9.20	<0.001	HS
<i>SPANDANA</i>	1.5	0.35	1.15	76.66	0.37	0.08	19	14.038	<0.001	HS
<i>TANDRA</i>	1.85	0.50	1.35	72.97	0.59	0.13	19	10.283	<0.001	HS
<i>ARUCHI</i>	1.00	00	1.00	100	0.65	0.15	19	6.892	<0.001	HS
<i>GOURAVA</i>	1.10	00	1.10	100	1.02	0.23	19	4.819	<0.001	HS

*HS – Highly Significant, SS –Statistically Significant, NS – Not Significant

Unpaired t test

Table no.6 Showing the Statistical analysis of Group A and Group B after treatment

Parameters	Group-A			Group-B			DF	t VALUE	P VALUE	REM ARKS
	N	MD	SD	N	MD	SD				
<i>Stambha</i>	20	2.25	0.716 3500	20	2.15	0.745 1600	38	0.4327	>0.05	NS
<i>Ruk</i>	20	1.65	0.489 3600	20	1.15	0.745 1600	38	2.5083	<0.05	SS
<i>Toda</i>	20	1.5	0.606 9800	20	1.4	0.680 5600	38	0.4904	>0.05	NS
<i>Spandana</i>	20	1.5	0.688 2500	20	1.15	0.366 3500	38	2.0076	<0.05	SS
<i>Tandra</i>	20	2.1	0.552 5100	20	1.35	0.587 1400	38	4.1602	<0.05	HS
<i>Aruchi</i>	20	1.1	0.640 7200	20	1	0.648 8900	38	0.4904	>0.05	NS
<i>Gourava</i>	20	1.3	1.031 1000	20	1.1	1.020 8400	38	0.6164	>0.05	NS

*HS – Highly Significant, SS –Statistically Significant, NS – Not Significant(Unpaired t test was done using, Graph pad Quick Calcs t test calculator)