

## COMPARATIVE CONTROLLED CLINICAL STUDY OF *SIMHASYDHI GHANAVATI* OVER *TRAYODASHANGA GUGGLU* IN THE MANAGEMENT OF *GRIDHRASI* W.S.R. TO SCIATICA

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### ABSTRACT

Large number of population suffers from low back pain. Chronic low back pain (CLBP) prevalence increases linearly from the third decade of life on, until the 60 years of age, being more prevalent in women. Sciatica is the most common debilitating condition causes CLBP. Radiating leg pain and related disabilities are the observed in sciatica. Nearly 40% people experience sciatic pain at some point in their life. The diagnosis of sciatica and its management varies considerably within and between countries. Conventional Medicine and surgery are widely used in the management of sciatica. Sciatica resembles the disease *Gridharsi* of Ayurveda. *Gridharsi* is one among the *Vataja nanatmaja vyadhi*, where dysfunction of *Vata* affect *gridharsi nadi* characterized by low back pain radiating to lower limbs, stiffness and pricking type of pain. It starts from *kati- prishtha* (pelvic region and Lumbosacral) radiating to *jangha paada* (Thigh, Feet) with impairment of lifting the leg. The gait of the person is very similar to vulture (*Gridhra*) hence the name is given as *Gridharsi*. In this article, attempt has been made to review the Ayurvedic classic texts and role *Shamana chikitsa* in the management of *Gridharsi*.

**Keywords:** *Gridhrasi, Sciatica, Simhasyadhi Ghanavati, Trayodashanga guggulu.*

### INTRODUCTION

Low back pain is an extremely common problem that most people (70%) experiences at some point in their life. Pain is an unpleasant sensory and emotional experience that arising from actual or potential damage. In the present day today life busy professional and social life, improper sitting posture in working places, continuous and over exertion, jerky movements dur-

ing travelling and Sports creates undue pressure over the spine.

Exact data on the incidence and prevalence of sciatica are lacking. In general an estimated 30%- 40% of patients with low back pain have sciatica, where as the reported life time prevalence of low back pain

ranges from 49%- 70% and has annual incidence of 5% in the world.<sup>1</sup>

Sciatica is more common between 30 to 50 years of age which are the most productive days of life. *Gridhrasi* is one among 80 types of *shula pradhana nanaatmaja vata vyadhi* the cardinal symptom of *gridhrasi* are *Ruk* (pain), *Toda* (pricking sensation), *Sthambha* (stiffness), and *Muhuspandana* (twitching), in the *sphik, kati, uru, jan, jangha* and *pada* in order and *saktiksepa nigraha* i.e. restricted lifting of the leg. In *kaphanubandhata tandra, gourava, aruchi* will be present.

The name *gridhrasi* indicates the way of gait shown by the patient due to extensive pain just like a *gridra* (vulture).<sup>2</sup> The main line of treatment of *gridhrasi* is *vata* and *kaphahara chikitsa* karma like *snehana, swedana, virechana, basti chikitsa*. *Simhasyadhi yoga* contains the drugs have the properties like *snigdha, guru guna, ushna virya, madhura rasa* etc. which are helpful for the pacification of *vata* and *kapha dosha*. *Simhasyadhi Ghana vati* has the property of *vatahara* and *kaphahara* action so they are taken as to study the comparative efficacy of both the drugs<sup>3</sup>.

Many herbal therapeutic measures are described in the management of *gridhrasi* but they are yet to be

explored. On the quest of such an effective measures for possible radical management of *gridhrasi*, we came across a reference of *Simhasyadhi yoga* which contains (*vasa, aragvada, danti, eranda*) where *eranda* is being proved successfully in the management of *gridhrasi*. Here an attempt has been made to explore the clinical efficacy of *vasa, aragvada* and *danti* along with *eranda* in the form of *Ghana vati*<sup>4</sup>.

#### OBJECTIVES OF STUDY:

To assess the efficacy of *Simhasyadhi Ghana vati* over *Trayodashanga guggulu* in the management of *Gridhrasi*

#### SOURCE OF DATA -

- Patient suffering from *Gridhrasi* will be selected from O.P.D and I.P.D of D.G.M.A.M.C.H. GADAG
- LITERARY** -Literary aspect of the study pertaining to *gridhrasi* and sciatica will be collected from both ayurvedic as well as modern text books and will be updated with recent medical journals and researches.
- COMPOSITION OF TRAIL DRUG-**

**Table 1:** *Simhasyadhi Ghana vati*

S.NO	SANSKRIT NAME	BOTANICAL NAME	RATIO
1.	<i>Aragvada</i>	<i>Cassia fistula</i>	1part
2.	<i>Danti</i>	<i>Baliospermum montanum</i>	1part
3.	<i>Vasa</i>	<i>Adathoda vasica</i>	1part
4.	<i>Eranda</i>	<i>Riccinis communis`</i>	1part

**Table 2:** *Trayodashanga guggulu*

S.NO	SANSKRIT NAME	BOTANICAL NAME	RATIO
1.	<i>Abha</i>	<i>Acacia arabica</i>	1part
2.	<i>Hapusha</i>	<i>Junipers communis</i>	1part
3.	<i>Ashwagandha</i>	<i>Withania somnifera</i>	1part
4.	<i>Guduchi</i>	<i>Tinospora cardifolia</i>	1part
5.	<i>Shatavari</i>	<i>Aspergus racemosa</i>	1part
6.	<i>Gokshura</i>	<i>Tribulus terrestris</i>	1part
7.	<i>Vruddha dharuka</i>	<i>Argeria speciosa</i>	1part
8.	<i>Rasna</i>	<i>Alphinia officinarum</i>	1part
9.	<i>Sathavaha/shatapushpa</i>	<i>Anethum sowa</i>	1part

10.	<i>Shati</i>	<i>Aedichium spicatum</i>	1part
11	<i>Yavani</i>	<i>Carum copticum</i>	1part
12	<i>Nagara</i>	<i>Zingiber officinale</i>	1part
13	<i>Kaushika/guggulu</i>	<i>Commiferra mukul</i>	12 part
14	<i>Sarpi</i>	Ghrita	1 part

The trial drugs will be collected from local areas and market after being properly identified.

## METHOD OF COLLECTION OF DATA -

### a) STUDY DESIGN.

Single blind randomized comparative controlled clinical study

### b) SAMPLE SIZE:

A minimum of 40 patients were taken for study, made into two groups each having 20 patient.

**Group A:** 20 patients were received *Simhasyadhi Ghana vati*

**Group B:** 20 patients were received *Trayodashanga guggulu*.

### c) INCLUSION CRITERIA:

- *Pratyatma lakshanas* like *sphik purva, kati, prushta, janu, janga, pada kramat vedana. Sthamba, ruk, toda.*
- Patients in the age group of 20 to 65 years irrespective of sex
- Tenderness along the course of sciatica nerve.

### d) EXCLUSION CRITERIA:

- Known case of Benign or malignant tumour of the spine or tuberculosis of the vertebral column
- Associated with severe systemic disorders like Hypertension, Diabetes mellitus,
- Surgical indication such as progressive neurological deficit

### e) DIAGNOSTIC CRITERIA:

The diagnosis is mainly based on the clinical presentation of the patient according to the signs and symptoms mentioned in classical Ayurvedic and modern text, which are described under subjective and objective parameters.

### f) POSOLOGY:

**Group A:** 20 patients will receive *Simhsyadhi Ghana vati* 500 mg twice day after food with luke-warm water for 30 days.

**Group B:** 20 patients will receive *Trayodashanaga guggulu* 500mg twice day with luke warm water for 30 days.

### g) STUDY DURATION:

Treatment: - 30 days, Follow up -30 days, Total duration -60 days, Patient will be assessed clinically on 0th, 15th, 30th, 45th, 60<sup>th</sup> day.

### h) ASSESSEMENT OF RESULT:

The subjective and Objective parameters of base line data to post medication data compared for assessment of the final results. All the results are analyzed statistically for Signification using unpaired t- test.

#### 1. SUBJECTIVE PARAMETER

*Sthamba* (stiffens), *Ruk* (Radicular pain). *Toda* (pricking pain) in *sphik purva, kati, prushta, janu, janga, pada.*

#### 2. OBJECTIVE PARAMETER:

SLR TEST, Lumbar spine movement, Walking time

#### i) INVESTIGATION:

CBC, ESR, RBS, X-RAY –LUMBAR SPINE (AP AND LATERAL VIEW)

**ASSESSMENT CRITERIA:** Effect of treatment was assessed on basis of changes found in the gradation of the both individual and overall parameters according to their severity before, during treatment and after treatment.

#### Grading of subjective parameters

##### *Sthamba*

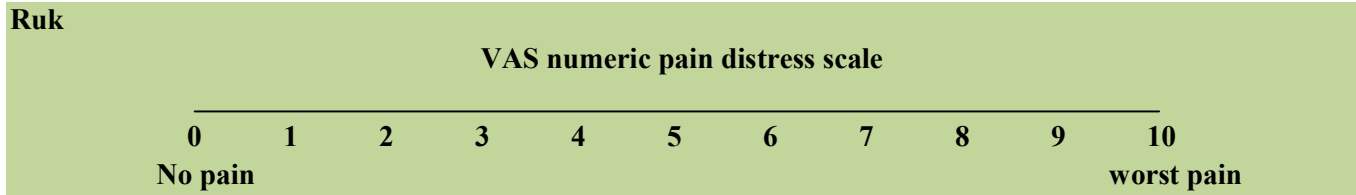
Grade0 – No stiffness

Grade 1 – Up to 25% impairment of movement

Grade 2 – 25%-50% of impairment of movement

Grade 3 – 50%-75% of impairment of movement

Grade 4 – More than 75%



### Toda

- Grade 0- absent
- Grade 1-mild occasionally in a day
- Grade 2-after movement, daily frequent not persistent
- Grade 3-after movement, frequent and persistent
- Grade 5-persistent

### Objective Parameters

#### SLR test

#### Lumbar spine movement (flexion of the lumbar spine)

- Grade0 – 0-10cms
- Grade1 – 11-20cms
- Grade2 – 21-30cms
- Grade3 – 31-40cms
- Grade 4 – 41-50cms
- Grade5- 51-60cms

### Observation and results

**Ruk:** t value is 0.90 and corresponding p value is  $>0.05$  we can conclude that mean effect of *ruk* is same in both the group and is statistically not significant.

**Stambha:** t value is 1.37 and corresponding p value is  $> 0.05$  we can conclude that mean effect of *stambha* is same in both the group and is statistically not significant.

**Toda:** t value is 1.0 and corresponding p value is  $>0.05$  we can conclude that mean effect of *ruk* is same in both the group and is statistically not significant.

**Active SLR right lower limb:** t value is 2.33 and corresponding p value is  $<0.05$  we can conclude that there is difference between Group A and Group B in active SLR test of right lower limb and is statistically significant.

**Active SLR left lower limb:** t value is 2.33 and corresponding p value is  $>0.05$  we can conclude that

mean effect of active SLR left lower limb is same in both the group and is statistically not significant.

**Passive SLR right lower limb:** t value is 1.0 and corresponding p value is  $>0.05$  we can conclude that mean effect of passive SLR right lower limb is same in both the group and is statistically not significant.

**Passive SLR left lower limb:** t value is 1.50 and corresponding p value is  $>0.05$  we can conclude that mean effect of passive SLR left lower limb is same in both the group and is statistically not significant.

**Forward flexion:** t value is 2.56 and corresponding p value is  $<0.05$  we can conclude that there is difference between Group A and Group B in active forward flexion and is statistically significant.

**Right lateral flexion:** t value is 2.26 and corresponding p value is  $<0.05$  we can conclude that mean effect of right lateral flexion is same in both the group and is statistically not significant.

**Left lateral flexion:** t value is 1.67 and corresponding p value is  $<0.05$  we can conclude that mean effect of left lateral flexion is same in both the group and is statistically not significant.

**Extension:** t value is 2.62 and corresponding p value is  $<0.05$  we can conclude that there is difference between Group A and Group B in extension and is statistically significant.

**Rotation:** t value is 1.1 and corresponding p value is  $>0.05$  we can conclude that mean effect of rotation is same in both the group and is statistically not significant.

**Walking time:** t value is 1.25 and corresponding p value is  $>0.05$  we can conclude that mean effect of walking time is same in both the group and is statistically not significant.

## DISCUSSION

*Trayodashanga guggulu* is described in *Bhishajya ratnavali* which is also indicated in *gridhrasi*. Main contents of this *guggulu* preparation are *Abhā* (babul), *Ashwagandhā*, *Hapushā*, *Guduchi*, *Shātāvāri*, *Gokshura*, *Rāsnā*, *Shyāmā*, *Shati*, *Yavāni*, *Shatāvah*, *Shunthi* all in equal parts, *guggulu* being the main ingredient is taken in 12 parts *guggulu* acts as analgesic and anti-inflammatory. *Rāsnā* (*Pluchea lanceolata*) present in *Trayodashānga guggulu*, pacifies the *vata* as Ācharya Charaka has stated *rāsnā* as *vataharanām*, *shunthi* (*Zingiber officinale*) being *ushna virya* also pacifies the *vata*, drug while *Ashwagandhā* (*Withania somnifera*), *Shatāvāri* (*Asparagus racemosus*), *Guduchi* (*Tinospora cordifolia*) are the *rasāyan dravya* present in the preparation which can check the degenerative process going on, by providing nutrition to bones and joints. *Guduchi* has additional anti-oxidant and immune modulating property helps curing the underlying pathology. *Babbul*, *Gokshur*, *Yawani* possess Muscle Relaxant property & *Ashwagandha*, *Vridhdharu*, *Rasna* possess Antispasmodic, Spasmolytic properties.

As we have taken in the form of *ghanvati* which contains the essence of all the mentioned drugs which is highly potent in nature and helpful in reducing the pain. In Ayurveda different formulations are being explained because of different reasons like to increase palatability, Increase self-life, Preserve for a longer period, Increase potency like so that out of *Simhasydhī yoga* we made *ghanavati* which may influence the below mentioned property.

## CONCLUSION

The classical *nidanas* like *Aharaja*, *viharaja*, *manasika* and other *nidanas* are elicited in the patients and most of the patients followed the *nidanas* as explained in the classics so they got the *lakshanas* like *saktikshepa nigraha*, *stambha*, *ruk*, *toda in katipradesh*. Drugs in *Simhasyadhī Ghanavati* and *Trayodashanga guggulu* are mainly *Ushnavirya*, *Katu vipaka*, *kapha vatahara* by virtue of these properties it reduces *vata dushti* as well as *kapha dushti*.

Both the groups are having similar effect on reducing the symptoms statistically. Among the subjective and objective parameters Group B showed better reduction% in *Ruk*, *Stambha*, *Toda*, right lateral flexion, left lateral flexion and extension of lumbar movement, walking time. Group A showed better reduction % in active and passive SLR test and forward flexion of the lumbar movement.

## REFERENCES

1. Taber's cyclopedic medical dictionary, edited by Donald venes, M.D., M.S.J., 20<sup>th</sup> edition, copy right by F.A.Davis company in 2005, page no. 1566
2. Charakasamhita chikitsasthana 28 chapter 56<sup>th</sup> sloka by brmhananda tripathi Edited by Yadavji Trikamji Acharaya, reprint year 2009, Chaukhamba surbharati Prakashan Varanasi, page no 622.
3. Agnivesha, charaka and Drdhabala with ayurveda Dipika commentary By Chakrpanidatta, Charaka samhita siddhisthana 4<sup>th</sup> chapter, shloka-23&24, Edited by Yadavji Trikamji Acharaya, reprint year 2009, Chaukhamba surbharati Prakashan Varanasi, page no.699.
4. Bhavamishra, Bhavaprakasha Uttarakhand, edited by Bishakrathna Sri Brhmashankar Misra, chapter 24 sloka 140. Varanasi: Chaukhambha Sanskrit Sadana; 1988. p. 243-244.
5. Sushruta samhita, nidana sthana 1<sup>st</sup> chapter 74<sup>th</sup> shloka, reprint year 2010, published by Choukambha Surabharati Prakashana Varanasi, page no: 268.
6. Ashtanga Sangraha & Ashtanga Hridaya by Acharya edited by Bramhananda tripathi, chokamba Sanskrit pratistana Delhi, reprint 2003, 23 chapter.
7. Sharangadhara, Sarngadharasamhitha Madhyamakhandha edited by Pandit Parasurama Sasatri, chapter 5 – 6<sup>h</sup> sloka. Varanasi: Chaukhambha Orientalia; 2007 page no. 174.
8. Bhela Samhita, chikitsasthana, 24<sup>th</sup> chapter, shloka 32 33<sup>rd</sup>, reprint year-2005, Published by Choukambha visvabharati Varanasi, page no.452,453.
9. Bhela Samhita, chikitsasthana, 24<sup>th</sup> chapter, 44<sup>th</sup> shloka, reprint year-2005, Published by Choukambha visvabharati Varanasi, page no.454.
10. Chakradatta, edited by priyavrit Sharma, urusthambha chikitsaadhyaya 24<sup>th</sup> chapter, 12<sup>th</sup> shloka, Kashi Ayurveda series 17, 2<sup>nd</sup> edition 1998, published by Choukambha orientalia Varanasi Delhi,

page no:22.

11. vngasena samhita, vatavyadhi nidana adhyaya, shloka- 113-115, 1<sup>st</sup> edition 2004 , Vol. 1, published by Choukambha Sanskrit Series office, Varanasi. Page no.404
  12. Shree vaidya shodala, Gadanigraha, 16<sup>th</sup> chapter, shloka-62, 63, 64, with Vidyodini hindi commentary by Shri Ganga Sahaya Pandeya, 1<sup>st</sup> edition, part II, published by Choukambha Sanskrit Series office , Varanasi. Page no.486, 487.
  13. Sri Madhvakara, Madhavanidanam, edited by Yadunandana Upadhyaya, chapter 54<sup>th</sup> sloka. Chaukhamba Sanskrit Sansthan; 1985 page no.437.
  14. Hrita samhita, truteeya sthana 22<sup>nd</sup> chapter, shloka- 1<sup>st</sup>, 2<sup>nd</sup>, 1<sup>st</sup> edition 2010, published by Choukambha visvabharathi Varnasi, page no: 380. truteeya sthana 20<sup>th</sup> chapter, shloka- 31<sup>st</sup>,32<sup>nd</sup>, 1<sup>st</sup> edition 2010, published by Choukambha visvabharathi Varnasi, page no: 363.
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