

Structured Panchakarma Protocol For Gridhrasi: An Evidence-Based Single Case Report.

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Abstract: Background: *Gridhrasi* is one of the most common disorders of Vata, which closely resembles with sciatica, which is characterized by pain or discomfort associated with sciatic nerve. The prevalence of sciatica varies considerably ranging from 3.8% in the working population to 7.9% in the nonworking population. Contemporary medicine has limitations giving short-term relief in pain or surgical intervention with side effect. **Aim and Objectives:** The aim of this study was to assess the efficacy of Ayurvedic management including *Shodhana* and *Shamana Chikitsa* in *Vataja Gridhrasi*. **Materials and Methods:** It is a single case study. A 37-year-old female presented with lower back pain radiating to the right leg, associated with numbness and calf muscle stiffness for 2½ months. She also had difficulty climbing stairs, disturbed sleep, pain while walking even a few steps, and impaired gait. Patient approached to our hospital, diagnosed as *Vataja Gridhrasi* and treated with *Sarvanga Abhyanga and Bashpa Sweda, Sadhyovirechana, Siravyadha, Kati Basti, Sarvanga Snigdha Churna Pinda Sweda, Karma Basti-Siddha Basti and Balaguduchyadi Niruha,* and *shamana oushadhis* with follow ups. The treatment was continued for consecutive 1 month and follow up till Nov 2025. **Results:** Symptomatic assessment of patient was carried out after treatment, after repeated follow ups and satisfactory outcome was seen and overall quality of life of patient was significantly improved. **Conclusion:** The aforementioned therapy gives symptomatic relief for the management of *Gridhrasi*, no relapse of symptoms was seen with regular follow ups.

Keywords: *Gridhrasi, Vatavyadhi, Siravyadha, Siddha basti, Panchakarma.*

I. INTRODUCTION

Low back pain (LBP) is one of the most prevalent musculoskeletal complaints worldwide, with an estimated 80 % of individuals experiencing at least one episode during their lifetime. Among the multiple etiologies of LBP, intervertebral disc prolapse (IVDP) is a leading cause of radicular pain and functional disability ^[1]. IVDP ^[2] is defined as the protrusion of the gelatinous nucleus pulposus through a tear in the fibrous annulus fibrosus of an intervertebral disc, often resulting in nerve root compression and radiculopathy when occurring at lower lumbar levels such as L4-L5 and L5-S1. Approximately 95 % of lumbar disc herniations involve these segments ^[3].

The clinical presentation of IVDP-induced radiculopathy includes pain in the lumbar region with characteristic radiation to the lower limb, paresthesia, stiffness, and gait impairment, collectively outlining features of sciatica syndrome ^[4]. Sciatica represents a significant cause of morbidity, with lifetime prevalence estimates ranging from approximately 1.2 % to 43 % and annual incidence between 1 % and 5 % ^[5]. It is most prevalent in people during their 40s and 50s and men are more commonly affected than women. Low back pain has been enumerated as fifth most common cause for hospitalization and the third most frequent reason for a surgical procedure ^[6].

In Ayurvedic literature, the clinical features of sciatica closely mirror those described for *Gridhrasi*, a *Nanatamajavata Vyadhi* [7]. The term *Gridhrasi* itself reflects the gait disturbance seen in affected individuals, analogous to the vulture's (*Gridha*) compromised stance due to extreme pain. Cardinal manifestations include *Ruk* (pain), *Toḍa* (pricking sensation), *Muhuspada* (tingling), and *Stambha* (stiffness) involving the *Sphik* (lumbar region), *Kati* (lower back), *Uru* (thigh), *Janu* (knee), *Jangha* (calf), and *Pada* (foot) [8], along with impaired ability to flex the lower limb upwards (*Sakti-Kṣhepa-Nigraha*) [9]. When *Kapha* is concomitantly involved, symptoms such as *Tandra* (drowsiness), *Gaurava* (heaviness), and *Aruchi* (anorexia) may be observed [10].

Contemporary management strategies for symptomatic IVDP encompass conservative approaches analgesics, physical therapy, and lifestyle modification or surgical interventions in refractory cases [11]. However, limitations related to cost, variable efficacy, and post-operative complications underscore the need for effective alternative therapeutic modalities. Given the high burden of *Gridhrasi* and its profound impact on quality of life, there is a growing interest in integrative approaches, including ayurvedic management (*Shodhana* and *Shamana Chikitsa*). In this case study, a 37 year old female with *Vataja Gridhrasi* was prescribed for *Sthanika*, *Shodhana Chikitsa* and *Shamana Chikitsa*, which resulted in excellent symptomatic relief.

II. CASE REPORT

A 37-year-old female presented with lower back pain radiating to the right leg, associated with numbness and calf muscle stiffness for 2½ months. She also had difficulty in climbing stairs, disturbed sleep, pain while walking even a few steps, and impaired gait.

2.1 BRIEF HISTORY

A 37-year-old female normal built was asymptomatic until 2½ months prior to the presentation. Subsequently, she gradually developed intermittent low back pain, which was aggravated by prolonged sitting and positional changes during work and relieved on taking rest.

After one month, she suddenly developed severe low back pain radiating to the right lower limb, associated with numbness and mild stiffness over the right thigh and calf region. Due to this, her gait became impaired, and she experienced difficulty in walking, sitting in one position for a prolonged duration, and turning to the other side during sleep. Owing to the severity of symptoms, she discontinued her job and routine household activities and avoided forward bending and weight lifting.

For these complaints, she consulted an allopathic hospital in February 2025, where she was treated with oral medications for one week, which provided only temporary relief. MRI of the lumbosacral spine was also done, which revealed certain changes. Later, her symptoms got worsened, family dependency also increased, her gait did not improve, and she continued to have difficulty in performing regular activities, walking, and sleeping, along with persistent radiating pain, numbness in the right lower limb, and stiffness of the thigh and calf region.

With these persistent complaints, she visited our hospital, *Panchakarma* OPD for consultation on 29th March 2025. After three days i.e on 02 April 2025 she was admitted for further evaluation and comprehensive management.

PAST HISTORY

No history of trauma or fall.

No history of major medical illness like Diabetes Mellitus or Hypertension etc.

Surgical history-Cholecystectomy -2023

FAMILY HISTORY

Nothing significant.

PAST TREATMENT HISTORY

- Took Allopathy Medications for a Week during February 2025, details are unknown.

2.2 PERSONAL HISTORY

- Appetite - Good
- Bowel – Constipated (on medication)
- Micturition - Regular (4-5times /day)
- Sleep - Disturbed
- Habits-Tea occasionally
- Diet - Vegetarian

2.3 GENERAL EXAMINATION

- Pallor: Absent
- Icterus: Absent
- Cyanosis: Absent
- Clubbing: Absent
- Lymphadenopathy: Absent
- Oedema: Absent
- BP: 90/60 mmhg
- Pulse: 80bpm
- Respiratory rate: 20/min
- Temperature: 97°F

2.4 ASHTA STHANA PARIKSHA

- *Nadi – Vata pittaja*
- *Mala - Prakrita*
- *Mutra - Prakrita*
- *Jihva – Alipta*
- *Shabdha – Prakrita*
- *Sparsha – Anushna sheeta*
- *Drik – Prakrita*
- *Aakriti – Madhyama*

2.5 DASHAVIDHA PARIKSHA

- *Prakriti-Vata Pittaja*
- *Vikriti- Vata, Rasa, Meda, Asthi*
- *Sara - Madhyama*
- *Samhanana - Madhyama*
- *Pramana- Madhyama, Ht-159cm, weight-55kg, BMI-21.76kg/m²*
- *Satva - Madhyama*
- *Satmya- Madhura rasa pradhana shadrasa*
- *Ahara Shakti - Madhyama*
- *Vyayama Shakti - Avara*
- *Vaya -Madhyama*
- *Koshta-Krura*

2.6 CLINICAL FINDINGS

TABLE NO-1 EXAMINATION OF LOCOMOTOR SYSTEM

INSPECTION	<p>Limping gait</p> <p>Discomfort in walking.</p> <p>No local swelling and Varicosity.</p>
PALPATION	<p>Tenderness-Mild (+) over L4-L5, L5-S1, right lower back, buttock and ++over right calf muscle region.</p>
RANGE OF MOVEMENT OF LUMBAR SPINE	<p>Forward Flexion could not be elicited due to pain.</p> <p>All other movements were restricted and painful.</p>
SPECIAL TESTS	<p>Straight leg raise test- Right leg-positive at 60 degrees.</p> <p>Left leg-Negative</p> <p>Bragard's test-negative(B/L)</p> <p>Femoral nerve compression test-Negative(B/L)</p>

2.7 INVESTIGATION

MRI Of Lumbo-Sacral Spine-26/2/25

IMPRESSION- Large disc extrusion at L5-S1 level causing significant secondary canal stenosis and compression of bilateral descending S1 nerve roots, more on the right.

Fig-1 Showing MRI of Lumbo -Sacral spine report.

2.8 NIDANA PANCHAKA ^[12]

Nidana-Vihara-Ati yana (long travelling) and *Ati asana* (sitting for long time) due to her job.

Purva rupa-Shoola in kati

Rupa-Shoola and Stambha in *Kati* region radiating to right leg, numbness in right foot, difficulty while walking, sitting, sleeping posture and all movements.

Upashaya-Rest, application of pain-relieving gels.

Anupashaya-Strenuous exercise, work, long travelling, long hour sitting job.

Samprapti

Nidana sevana (viharaja) due to jerky movements while travelling and long sitting lead to *Vata prakopa*, and *dosha dushya samurchana* of *Vata* and *Rasa*, *Mamsa*, *Sira*, *Snayu* further leading to *srotodushti* i.e causing obstruction to the neural conduction(*Vatavahini Nadi*).*Sthana Samshraya* in *Kati*, further causes *Ruja* in *Kati*(lumbar region) radiating to posterior aspect of *Uru*(thigh), *Janu* (knee), *Jangha* (calf), and *Pada* (foot), with *Stambha* and which lead to *Vataja Gridhrasi*.

Samprapti Ghataka

- *Dosha: Vata*
- *Dhatu: Rasa, Mamsa, Meda, Snayu, Sira, Kandara*
- *Agni: Jataragni*
- *Ama: Jataragni and Dhatvagni Mandyajanya*
- *Srotas: Rasavaha, Mamsavaha, Asthivaha*
- *Srotodushti Prakara: Sanga, Vimargagamana*
- *Udbhava Sthana: Pakwashaya*
- *Sancharasthana: Sphik, Kati, Uru, Janu, Jangha and Pada.*
- *Adhistana: Kati, Adhobhaga*
- *Vyakta Sthana: Kati, Sphik, Uru, Janu, Jangha and Pada.*
- *Roga Marga:Madhyama*
- *Swabhava: Chirakari*
- *Sadhya asadhyata: Krichrasadhya*

Diagnosis-Vataja Gridhrasi

III. MATERIALS AND METHODS

A Single case report

THERAPEUTIC INTERVENTION

By analyzing the above pathogenesis of disease in this patient following treatment plan was prescribed, which can be subclassified under two categories, i.e., *Shodhana* and *Shamana Chikitsa* shown in Tables no 2,3,4 respectively.

Table 2: Showing Daywise treatment plan

DAY	TREATMENT	DIET AND OTHER OBSERVATION
02/04/2025	<ul style="list-style-type: none"> • <i>Sarvanga Abhyanga + Bashpa Sweda with Sahacharadi Taila</i> 	
03/04/2025	<ul style="list-style-type: none"> • <i>Sarvanga Abhyanga + Bashpa Sweda with Sahacharadi Taila</i> • <i>Sadhyovirechana with Trivrit Lehya-50 gram+Triphala Kashaya 100ml given at 8:30 am in empty stomach.</i> 	<p>Diet-Ganji given at 4:30pm</p> <p>Night-Khichadi given at 7:30pm</p> <p>Attained 3 Vegas</p>
04/04/2025	<ul style="list-style-type: none"> • <i>Sarvanga Abhyanga + Bashpa Sweda with Sahacharadi Taila.</i> • <i>Siravyadha done on 4 angula below right knee.</i> 	<p><i>Snigdha yavagu</i> given prior to <i>Siravyadha</i>.</p> <p>50ml of blood was removed.</p>
05/04/2025 -19/04/2025		
05/04/2025 -19/04/2025	<p><i>Kati basti with karpooradi taila till 11/04/2025.</i></p> <p><i>Snigdha churna Pinda Sweda with Kolakulathadi churna till 17/04/2025.</i></p>	

<p><i>Karma basti</i> course-</p> <p><i>Anuvasana basti-Guggulu tiktaka ghrita</i>-72ml</p> <p><i>Niruha basti</i>-</p> <ul style="list-style-type: none"> • N1-N4-<i>Siddha Basti: Guda Paka</i>-48 ml + <i>Saindhava Lavana</i>-12 g + <i>Shatapushpa Churna</i>-12 g + <i>Chincha Swarasa</i>-48ml + <i>Gomutra</i>-384ml Total-504ml • N5-N6:<i>Vaitarana Ksheera Basti-Guda Paka</i>-25ml, <i>Saindhava Lavana</i>-10gm, <i>Moorchita Tila Taila</i>-50ml, <i>Chincha Kalka</i>-50gm, <i>Ksheera</i>-200ml. • N7-N12:<i>Balaguduchyadi Ksheera Basti -Madhu</i>-80ml, <i>Saindhava Lavana</i>-8gm, <i>Balaguduchyadi Taila</i>-80ml, <i>Shatapushpa Kalka</i>-15gram, <i>Balaguduchyadi Kashaya</i>-200ml 	<p><i>Anuvasana basti</i> retained for 3 to 6 hrs.</p> <p><i>Niruha basti</i> retention time-2 to 6 mins.</p>
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Table no 3- Showing pattern of Basti

Day	5/4	6/4	7/4	8/4	9/4	10/4	11/4	12/4	13/4	14/4	15/4	16/4	17/4	18/4	19/4
<i>Anuvasana</i>	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15
<i>Niruha</i>		N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12		

Patient got her menstrual cycles on 20/04/2025, hence treatments were stopped.

SHAMANA OUSHADHIS (DISCHARGE MEDICATIONS)

Table 4: Showing Shamana Oushadis

MEDICINE	DOSAGE	DURATION
Lumbatone Capsule	2-0-2 after food	For 1 month
Spiner Tablet	1-1-1 after food	
<i>Trayodashanga Guggulu</i>	2-0-2 after food	
<i>Vedanantaka Linament</i>	For external application	

IV. RESULTS

During the course of treatment, about 40% pain relief was observed by the 3rd–4th day. By the 6th day of *Niruha Basti*, gait showed slight improvement and pain was considerably reduced. Initially, the patient had difficulty walking even 100 meters, sleeping on one side, and sitting in one position; however, after 7 days of treatment, she was able to climb stairs slowly and walk with only mild difficulty. Radiating pain gradually reduced. Bowel habits, which were initially constipated, became regular during the treatment period. Sleep was disturbed in the initial days due to pain but showed improvement after 7 days of treatment.

ON THE DAY OF DISCHARGE-19/04/2025

At the time of discharge, the patient's gait was normal with only mild tenderness present over the calf region. Range of motion was within normal limits, with occasional pain in the L4–L5 region and approximately 70% overall pain relief. Functional activities such as climbing stairs, maintaining sleep posture, and sitting tolerance showed marked improvement. A mild residual numbness persisted over the right foot, while special tests including Straight Leg Raise (SLR), Bragard's test, and Patrick's test were negative.

FOLLOW UPS

First follow-up 31/05/25:

During the first follow-up, the patient reported a marked reduction in low back pain radiating to both lower limbs along with decreased calf stiffness. Mild weakness in the lower limbs and slight numbness over the right foot little toe were present. Gait was normal, all clinical tests were negative, and the patient was able to sleep and sit comfortably. Bowel habits were regular, and there was no relapse of symptoms. The patient avoided travelling, heavy weight lifting, and office work during this period. She was advised *Yogaraja Guggulu* 2–0–2 after food, *Nuro-XT* tablet 1–1–1 after food, *Lumbatone* capsule 1–0–1 after food, *Ksheerabala Taila* for external application, and to continue physiotherapy exercises.

Second follow-up 26/07/25:

At the second follow-up, the patient maintained a normal gait and all tests remained negative. She had rejoined work from home, taking frequent breaks during working hours. She was able to perform all household activities without weakness or persistent pain, experiencing discomfort only once after prolonged travel, which subsided with rest. She was advised to continue external application of *Ksheerabala Taila* and physiotherapy exercises.

Third follow-up 27/11/25:

At the third follow-up, the patient continued to have a normal gait with only occasional numbness of the right foot fifth toe. She was able to perform all daily activities and had started attending office twice a week. There was no recurrence of symptoms. The patient was advised to continue *Ksheerabala Taila* for external application along with regular physiotherapy exercises.

V. DISCUSSION

Chikitsa Sutra (treatment principle) of *Gridhrasi* involves *basti karma*, *Siravyadha*, and *Agnikarma Chikitsa* [13]. The treatment protocol, which was planned for this patient can be divided into *Shodhana Chikitsa* with *basti karma* along with *Shamana Chikitsa*. The treatment principles applied for the management of this disease condition are *Vedanasthapana Chikitsa* (analgesic), *Shothahara* (anti-inflammatory), and *Vata dosha* pacifying treatment. The probable rationale behind selection of treatment and mode of action of these *Shodhana* and *Shamana Chikitsa* can be explored as follows:

SARVANGA ABHYANGA AND BASHPA SWEDA WITH SAHACHARADI TAILA AND SARVANGA SNIGDHA CHURNA PINDA SWEDA WITH KOLAKULATHADI CHURNA:

While explaining *Vatavyadhi chikitsa Acharya Charaka* [14] states *kevala nirupasthambhamadhou snehairupacharet..* i.e first *snehana* followed by *swedana* to be given. *Snehana* acts on *Sparshnendriya*, which is the seat of *Vayu* [15]. *Snehana* gives *Pushti* to *shushka dhatus* and *Swedana* relieves *shotha*, *stambha* and *graha*, just like how a dry wood after *Snehana* and *Swedana* can be easily bent without breakage, similar way body can be flexed easily [14]. Also together when performed they move doshas from *shakha* to *koshta* thereby tackling the *chalayamana Avastha* of doshas during *basti*. *Sahacharadi taila* [16] is having specific property of *Gati viseshatvam* (helps to move) due to its *Madhura* and *Tikta rasa* and having *Vatahara*, *Brimhana* (nourishing), and *Pachana* properties, thereby it corrects gait and improves range of movement. Hence initially *Sarvanga abhyanga* with *Sahacharadi taila* and *Bashpa sweda* given then instead of *Bashpa sweda*, *Sarvanga Snidgdha choorna pinda sweda* was given after 20 mins of *abhyanga* throughout the course of *Basti*.

SADYOVIRECHANA:As *Basti* is the prime line of treatment in *Vata vyadhi* and here in *Gridhrasi*, *Vata* is mainly involved. To attain *Koshta Shuddhi*, *Sadyovirechana* is administered prior to *Basti* [17]. Otherwise in *Ashuddha Koshta* if *Basti* is administered will lead to *ama*.

SIRAVYADHA: *Siravyadha* ^[13] is indicated in *Gridhrasi* to remove vitiated blood, helping to clear *Sroto avarodha*, thereby giving quick relief in pain and stiffness.

KATI BASTI WITH KARPOORADI TAILA: *Kati basti* is a type of *Snigdha Swedana*. Application of *Kati basti* (L4-L5 region) was carried out to provide good nourishment and strengthen the affected part and alleviate the *Vata vyadhi*. In this case, there is degeneration of intervertebral disc and lubrication function of *Shleshaka kapha* is affected, which resulted in compression and irritation. *Kati basti* with *Karpooradi Taila* is a unique combination in which, properties of both *snehana* and *swedana* are incorporated, which helps to lubricate local musculature as well as tissue of nearby affected region and also increases local blood flow that help to drain out the inflamed exudates ^[18].

BASTI: *Gridhrasi* is one among the *Vata vyadhi*, *Vata dosha* is mainly involved here. As *Basti* is prime line of treatment *Siddha Basti* type of *Vaitarana Basti* has direct indication in *Gridhrasi*. The ingredients of *Vaitarana Basti*, *Guda* and *Saindhava* which are having *avidahi* property, *Shatapushpa* which is having *shoolaghna* property, *Chincha*, *Gomutra* which are of *ushna*, *teekshna guna yukta* and by all these *sangha* and *vimarga gamana* of *doshas* are removed, helping in *Samprapti vighatana*. (*vangasena Samhita bastiadhikara*)

Then to attain *Brimhana* action, as patient had slight weakness over right leg along with numbness in foot on and off, and mainly *Vata Pradhana*, *Balaguduchyadi Niruha* was administered which relieved her weakness in right leg and improved her condition.

SHAMANA OUSHADHI

Trayodashanga Guggulu: *Vatanulomana* and *Aampachana* properties of the ingredients of *Trayodashanga Guggulu* help in relieving *Malabaddhata* (Constipation). Along with this, it has anti-inflammatory, anti-arthritis, anti-gout, analgesic, muscle relaxant, and antioxidant properties by energize the growth of bone forming cells by producing more osteoclasts and osteoblasts. It prevents the pro-inflammatory cytokines, activity of xanthine oxidase, hydrogen peroxide, and renal microsomal lipid peroxidation process and also blocks the action of histamine and enhances the level of dopamine ^[19].

Spiner Tablet: Contains *Rasna*, *Guggulu*, *Shallaki*, has neuropathic & inflammatory pain control.

Lumbatone Capsule: It is a soft capsule contains *Eranda Taila*, *Tila Taila*, *Sahachara*, *Guduchi*, *Dashamoola*, *Punarnava*, *Manjishta*, *Ela*, *Guggulu*, which reduce pain and inflammation, prevent degeneration, and promote nerve and ligament healing.

Vedanantaka Linament: Contains *Gandhapura taila* (wintergreen oil), *Tailaparni taila* (eucalyptus oil), *Shallaki* oil, Camphor, *Pudina Satva* helps in relieving pain and stiffness.

Ksheerabala Taila: ^[20] Which has *Bala* as main ingredient which is known for its neuroprotective, pain-relieving, and anti-inflammatory properties, and is a key herb for strengthening the nervous and musculoskeletal systems, and relieves from weakness.

Yogaraja Guggulu: It is *Tridosha hara*, indicated in *Vata rogas*. With anti-inflammatory and analgesic herbs such as *Rasna*, *Amla*, *Guggulu* etc relieves pain, and helps in disc regeneration ^[21]. (*Bh ratnavali amavata chikitsa 29/153-161*)

Nuro X T Tab: It is an Ayurvedic proprietary medicine, contains *Ekangaveera Rasa*, *Mahavata gajankusha Rasa*, *Vata Kulantaka Rasa*, *Vata Gajankusha Rasa*, *Bala*, *Shuddha Shilajatu*. which has anti-inflammatory, analgesic and regeneration properties which helps to balance the *Vata dosha*.

By taking all the aforementioned discussion into consideration that the overall effect of all treatment regime planned in this patient induces *Vatashamana*, *Srotoshodhana*, and *Shothahara* effects, that is, it can be used as an excellent analgesic, anti-inflammatory, and nutritive therapy for such degenerative entity.

VI. CONCLUSION

The comprehensive Ayurvedic treatment combining *Panchakarma*, oral medications, effectively managed *Gridhrasi* symptoms by reducing inflammation, restoring neural function, and improving mobility. *Karma Basti* was pivotal in pain relief and gait correction. This approach ensured lasting functional recovery and quality of life improvement for the patient. Regular follow-up and adherence to therapy mitigated symptom relapse. This study is about the presentation of the single case only. An attempt must be made for further exploration of effect of these *Panchakarma* therapies in large population for establishing standard treatment protocol.

VII. PATIENT CONSENT

Written informed consent was obtained from the patient for publication of this case report.

VIII. FINANCIAL SUPPORT AND SPONSORSHIP

Nil.

IX. CONFLICTS OF INTEREST

There are no conflicts of interest.

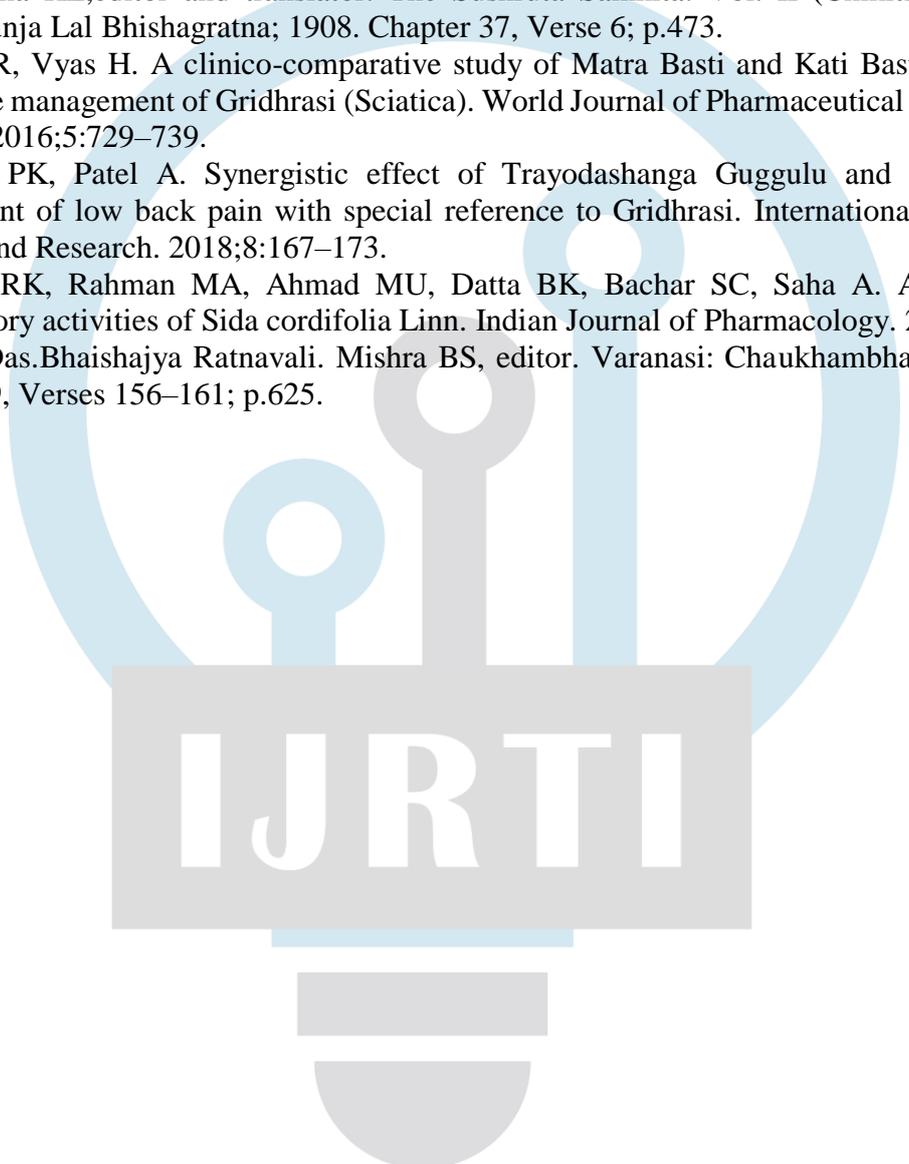
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A large, light blue watermark logo is centered on the page. It features a stylized lightbulb shape with a circular top and a semi-circular bottom. Inside the circle, there are three vertical lines of varying heights, each ending in a small circle. Below the circle is a grey rectangular box containing the text 'IJRTI' in white, bold, sans-serif capital letters. Below the box are two horizontal bars, one above a semi-circular base.

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