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ROLE OF KALA BASTI IN THE MANAGEMENT OF GRIDHRASI (SCIATICA): A NARRATIVE REVIEW

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ABSTRACT

Sciatica is one of the most common causes of radiating low back pain and is a major contributor to musculoskeletal disability worldwide. In Ayurveda, this condition is described under Gridhrasi, a Vata-predominant, or occasionally Vata-Kapha-predominant, disorder in which pain, stiffness and a characteristic gait affect the low back and lower limb along a course closely resembling the distribution of the sciatic nerve. Basti Chikitsa, the rectal administration of medicated decoctions and oils, is described in classical Ayurvedic texts as the foremost treatment for Vata disorders and is termed Ardha Chikitsa, or half of all treatment, because the colon is regarded as the primary seat of Vata. Among the classical Basti schedules, Kala Basti is a sixteen-day protocol that alternates Anuvasana Basti (oil enema) and Niruha or Asthapana Basti (decoction enema), and occupies an intermediate position between the shorter Yoga Basti and the more extensive Karma Basti. It is frequently selected for moderate to chronic presentations of Gridhrasi. This review examines the classical conceptual basis of Gridhrasi and Basti Chikitsa, the composition and rationale of commonly used Kala Basti formulations, the pharmacological properties attributed to key ingredients such as Eranda, Dashamoola and Nirgundi, and the available

published clinical evidence, including comparative studies and case reports. Across the studies reviewed, Kala Basti and related Basti protocols were consistently associated with improvement in pain, straight-leg-raise angle and functional mobility, although the overall evidence base remains limited by small sample sizes, heterogeneous formulations, and inconsistent outcome measures. Directions for future well-designed clinical research are outlined.

KEYWORDS: Kala Basti, Gridhrasi, Sciatica, Panchakarma, Vata Vyadhi, Basti Chikitsa, Ayurveda, Erandamoola, Dashamoola.

1. INTRODUCTION

Sciatica is a clinical syndrome characterised by pain radiating along the distribution of the sciatic nerve, commonly travelling from the lower back through the buttock and posterior thigh down to the leg and foot. It is frequently associated with lumbar disc prolapse, degenerative spondylosis, spinal stenosis, or nerve root irritation, and it affects a large proportion of adults at some point in their working lives, with substantial impact on productivity and quality of life.[1] Conservative management with analgesics, muscle relaxants, and physiotherapy remains the mainstay of modern treatment, with surgery reserved for progressive neurological deficit or symptoms refractory to conservative care.[2] Concerns regarding long-term analgesic use, incomplete relief, and the invasive nature of surgery have led many patients to seek complementary approaches, among which Ayurveda has a long-standing tradition of managing Vata-predominant musculoskeletal disease.

Within Ayurveda, sciatica is correlated with Gridhrasi, a disease described among the Vata Vyadhis, or disorders of the Vata dosha, in classical texts such as the Charaka Samhita,[3] Sushruta Samhita[4] and Ashtanga Hridaya.[5] The name Gridhrasi is derived from Gridhra, meaning vulture, referring to the characteristic limping or dragging gait seen in affected patients, comparable to the gait of a vulture. Basti Chikitsa, the rectal administration of medicated decoctions and oils, is considered the most important among the Panchakarma procedures for pacifying Vata, since the large intestine, or Pakwashaya, is regarded as the primary anatomical seat of Vata in the body.[3] Among the classical Basti schedules, Kala Basti is frequently selected by clinicians for moderate to chronic presentations of Gridhrasi. This review brings together the classical conceptual basis, the pharmacological rationale, and the currently available clinical literature on Kala Basti in sciatica, with the intention of

supporting further well-designed clinical research and informing evidence-based integrative practice.

2. Review Methodology

This is a narrative, non-systematic review. Relevant material was identified through a search of published Ayurvedic and biomedical literature on Gridhrasi, sciatica, Basti Chikitsa, and Kala Basti, together with classical textual references from the Charaka Samhita, Sushruta Samhita and Ashtanga Hridaya and their standard commentaries. Case reports, comparative clinical studies, open trials, pilot studies, and one systematic review were included to provide a broad picture of the available evidence. Given the narrative design and the heterogeneity of the underlying studies, no formal risk-of-bias assessment or meta-analysis was performed; readers should treat the synthesis as hypothesis-generating rather than definitive.

3. Sciatica: Modern Perspective

3.1 Etiology and clinical features

Sciatica typically presents with unilateral low back pain radiating below the knee, often accompanied by paraesthesia, numbness, or weakness along the L4 to S3 nerve root distribution. The most common structural cause is lumbar intervertebral disc prolapse compressing a nerve root, followed by degenerative spondylosis, spinal canal or foraminal stenosis, and, less commonly, piriformis syndrome or other extraspinal causes of nerve entrapment.

3.2 Diagnosis

Diagnosis is largely clinical, based on the pattern and distribution of pain, and is supported by provocative tests such as the straight-leg-raise test. Imaging, including magnetic resonance imaging, is reserved for patients with red-flag features, progressive neurological deficit, or symptoms that fail to respond to an adequate trial of conservative treatment.

3.3 Current management and its limitations

Conservative treatment, including analgesics, non-steroidal anti-inflammatory drugs, short courses of muscle relaxants, epidural steroid injections in selected cases, and structured physiotherapy, is effective in a substantial proportion of patients, with many improving within several weeks.[2] However, a subset of patients has persistent or recurrent symptoms despite these measures, and long-term or repeated use of analgesics carries recognised gastrointestinal, renal, and dependency-related risks. Surgical discectomy is generally

reserved for patients with severe, progressive, or refractory symptoms. These limitations of purely conservative or interventional care create room for complementary approaches such as Ayurvedic Basti Chikitsa, which aims to address the underlying Vata pathology rather than symptoms alone.

4. Gridhrasi in Ayurveda: Classical Perspective

4.1 Nidana (etiological factors)

Classical texts attribute the onset of Gridhrasi to habits and factors that aggravate Vata, including excessive physical strain, heavy weight-lifting, prolonged sitting or standing in incorrect posture, exposure to cold, irregular or insufficient diet, and suppression of natural urges.[3] These factors are understood to vitiate Vata, which then localises in the Kati-Sphik-Uru-Jangha region.

4.2 Purvarupa and Rupa (premonitory and manifest features)

Premonitory symptoms are usually mild and non-specific, such as slight stiffness or discomfort in the lower back. Once manifest, Gridhrasi is characterised by Ruk (pain), Toda (pricking sensation), Stambha (stiffness), Spandana (twitching or throbbing), and Sakthi Sadana (weakness or heaviness of the thigh), with pain radiating from the hip through the back of the thigh, knee, and leg, and difficulty extending the affected limb.[3,5] These features correspond closely to the pain distribution, paraesthesia, and restricted straight-leg-raise seen in modern sciatica.

4.3 Classification

Gridhrasi is classically described in two forms.[3] Vataja Gridhrasi is dominated by pain, pricking sensation, and stiffness due to pure Vata vitiation. Vata-Kaphaja Gridhrasi additionally shows features attributable to associated Kapha involvement, such as heaviness (Gaurava), drowsiness (Tandra), and loss of appetite (Aruchi), alongside the pain and stiffness of Vata. This distinction is clinically relevant, since formulations with additional Kapha-pacifying properties are often preferred when Kapha features predominate.

4.4 Samprapti (pathogenesis) and Samprapti Ghatak

The pathogenesis of Gridhrasi is understood as vitiated Vata, often together with Kapha, becoming lodged in the Kati-Sphik region, obstructing the channels that nourish bone, marrow, ligament, and vascular tissue in the lower limb, and being forced to travel along an abnormal path (Vimargagamana) corresponding to the anatomical course of the sciatic

nerve.[3,4] Table 1 summarises the key components (Samprapti Ghatak) of this pathogenesis alongside their modern correlation.

Table 1: Samprapti Ghatak (components of pathogenesis) of Gridhrasi.

Component	Classical description	Correlation / explanation
Dosha	Vata (chiefly), often with Kapha association	Aggravated Vata, sometimes Vata-Kapha, obstructing normal channels of the lower limb
Dushya (tissues involved)	Asthi, Majja, Snayu, Sira	Bone, marrow, ligament/tendon and vessel elements affected along the course of the sciatic nerve
Srotas (channels)	Asthivaha, Majjavaha, Vatavaha	Channels carrying bone/marrow nutrition and Vata movement become obstructed (Srotorodha)
Srotodushti prakara	Sanga (obstruction), Vimargagamana (wrong pathway)	Vata is obstructed and forced along an abnormal course, producing radiating pain
Udbhavasthana (site of origin)	Pakwashaya / Kati	Colon and lumbar region, the primary seat of Vata
Sancharasthana (path)	Sphik, Kati, Prishtha, Uru, Janu, Jangha, Pada	Hip, low back, thigh, knee, leg and foot, corresponding to the sciatic nerve distribution
Vyaktasthana (site of manifestation)	Gridhrasi Nadi (sciatic nerve pathway)	Pain becomes clinically evident along this nerve pathway
Roga marga	Madhyama (middle pathway)	Involves deeper musculoskeletal structures rather than superficial skin alone

4.5 Sadhya-Asadhyata (prognosis)

Recently developed, uncomplicated Vataja Gridhrasi in a patient of good strength is generally considered easier to manage (Sadhya), whereas long-standing, recurrent disease, or disease complicated by significant structural spinal pathology or neurological deficit, is regarded as more difficult to manage (Kricchrasadhya or Asadhya) and may require correlation with, or referral for, modern investigation and intervention.[3]

5. Basti Chikitsa: Concept and Rationale

5.1 Basti as Ardha Chikitsa

Basti is one of the five major Panchakarma procedures and is regarded in the Charaka Samhita as the foremost therapy for Vata disorders, since the large intestine is considered the principal anatomical seat of Vata. Classical verses describe Basti as capable of addressing conditions that the remaining four Panchakarma procedures together cannot fully resolve, and it is therefore referred to as Ardha Chikitsa, or half of the entire treatment.[3] This position given to Basti in the classical texts underlies its frequent selection as the primary treatment

modality for Vata-dominant musculoskeletal disorders such as Gridhrasi, a premise supported by clinical studies demonstrating symptomatic benefit with Panchakarma-based Basti therapy in this condition.[6,7]

5.2 Types of Basti relevant to Gridhrasi

- Anuvasana Basti: a comparatively small-volume, oil-based enema that is retained in the body and acts to lubricate, nourish, and locally pacify Vata (Snehana).
- Niruha or Asthapana Basti: a larger-volume decoction-based enema that also contains honey, rock salt, and herbal paste, retained briefly and then expelled, acting to cleanse obstructed channels and reduce associated Kapha and Ama (metabolic waste).
- Matra Basti: a small-volume oil enema (approximately 72 mL) that can be administered even on a single day without extensive preparatory measures, and is sometimes used as an adjunct or maintenance procedure alongside a full Basti course.

5.3 Procedural framework: Poorvakarma, Pradhankarma and Paschatkarma

Every Basti procedure is conducted in three stages. Poorvakarma (preparatory stage) includes assessment of the patient's constitution, strength and suitability, exclusion of contraindications, and often a short course of Deepana-Pachana (digestive stimulant) medicines together with Snehana (oleation) and Swedana (fomentation) of the lower back and limb. Pradhankarma (main procedure) is the actual administration of Anuvasana or Niruha Basti through a Basti Yantra, an enema apparatus classically described and now typically replaced by a soft catheter and syringe or bag, with the patient positioned in left lateral decubitus with the affected leg flexed. Paschatkarma (post-procedure stage) includes observation of Basti Pratyagamana Kala, the time taken for the enema to be expelled, dietary advice, and monitoring for any adverse response, before the next scheduled Basti in the sequence.

6. Kala Basti: Protocol and Position Among Basti Schedules

Kala Basti is described in the Charaka Samhita as a schedule comprising approximately half the number of Bastis given in Karma Basti, a thirty-day protocol. Chakrapani, the classical commentator on the Charaka Samhita, clarifies that this is conventionally taken as sixteen Bastis administered over sixteen days, consisting of six Niruha (or Asthapana) Bastis and ten Anuvasana Bastis.[3] Vagbhata, in the Ashtanga Hridaya, describes a broadly comparable schedule oriented around the same sixteen-day framework.[5] In practice, Anuvasana and Niruha Bastis are interspersed rather than given consecutively, so that the lubricating action

of the oil enemas and the cleansing action of the decoction enemas complement each other across the course. Table 2 compares Kala Basti with the shorter Yoga Basti and the more extensive Karma Basti.

Table 2: Comparison of Yoga Basti, Kala Basti and Karma Basti.

Feature	Yoga Basti	Kala Basti	Karma Basti
Duration	8 days	16 days	30 days
Total Bastis	8	16 (6 Niruha + 10 Anuvasana)	30 (18 Niruha + 12 Anuvasana)
Chronicity indicated	Mild disease, first presentation, or as a preparatory course	Moderate, recurrent, or moderately chronic Vata disease	Severe, long-standing, or deep-seated Vata disease
Typical use in Gridhrasi	Early or mild sciatic pain, or in patients with lower strength (Bala)	Commonly selected protocol for clinically established Gridhrasi of moderate severity	Reserved for chronic, recurrent, or refractory sciatica in patients with adequate strength

Kala Basti's intermediate duration allows sufficient repeated exposure to both Anuvasana and Niruha Bastis to address a moderately chronic presentation of Gridhrasi, without the greater time, cost, and physiological demand associated with the full thirty-day Karma Basti, which is reserved for the most severe or deep-seated disease.

7. Formulations Commonly Used in Kala Basti for Gridhrasi

Classical and clinical literature describes several decoction and oil formulations used for the Niruha and Anuvasana components of Kala Basti in Gridhrasi, selected according to the patient's Dosha predominance and the treating physician's clinical judgment.[8,9,10,11,12] Representative formulations are summarised in Table 3.

Table 3: Representative Basti formulations used in the management of Gridhrasi.

Formulation	Composition	Rationale / classical indication
Erandamooladi Niruha Basti	Decoction of Eranda moola (castor root) with other Vata-pacifying roots, combined with honey, rock salt and oil	Classically indicated in Trika and Prishta Shoola (low back pain); Eranda moola is described as a Shreshtha Vatahara (excellent Vata-pacifying) drug
Dashamoola Niruha Basti	Decoction of the ten-root (Dashamoola) group	Broad-spectrum anti-inflammatory and Vata-Kapha pacifying action, widely used in musculoskeletal Vata disorders
Nirgundi taila Anuvasana	Oil processed with Nirgundi (Vitex negundo)	Used for its Vata-Kapha pacifying (Vatashleshma-prashamana) and analgesic (Rujahara) properties in the oil-retention phase
Sahacharadi taila Anuvasana	Oil processed with Sahachara and related Vata-pacifying herbs	Commonly used oil for the Anuvasana component in Vata Vyadhi protocols

		including Gridhrasi
Vaitarana Basti	A specific single-sitting Basti combining cow's urine, oil, rock salt and other ingredients	Described in classical texts and later commentaries for Katishoola and Gridhrasi, occasionally used as an adjunct within a larger Basti course

Beyond the formulations listed above, other Basti preparations have also been documented in single case reports of Gridhrasi, including Panchatikta Ksheer Basti, a milk-based decoction Basti with bitter-tasting, Kapha-pacifying ingredients, generally used as an adjunct within a broader Shodhana and Shamana protocol.[13]

8. Pharmacological Rationale of Key Ingredients

Several of the herbs used in Kala Basti formulations for Gridhrasi have been studied, in isolation or in combination, for properties relevant to musculoskeletal pain. Eranda (Ricinus communis) and its root (Erandamoola) are classically described as Vatahara (Vata-pacifying) and are traditionally used for their laxative, anti-inflammatory, and analgesic properties, supporting their long-standing use in Basti for low back and sciatic pain. Dashamoola, a standardised group of ten roots, is widely used across Ayurvedic Vata-Kapha disorders for its broad anti-inflammatory and analgesic actions and is a common base for Niruha Basti decoctions in musculoskeletal disease. Nirgundi (Vitex negundo) is classically described as Vatashleshma-prashamana (Vata-Kapha pacifying) and Rujahara (pain-relieving), and is commonly used as the base oil for the Anuvasana component in Gridhrasi. While detailed pharmacological and mechanistic studies specific to Basti administration remain limited, the individual herbs used in these formulations have documented anti-inflammatory, analgesic, and antioxidant properties in the wider pharmacognosy literature, offering a plausible bridge between classical rationale and contemporary pharmacology; further targeted research is needed to confirm and quantify these effects specifically in the context of rectal administration.

9. Rationale for Selecting Kala Basti in Gridhrasi

Since Gridhrasi is fundamentally a Vata-predominant, or Vata-Kapha-predominant, disorder localised to the lumbo-gluteal and lower limb region, and Basti is regarded as the most direct route to correct Vata at its primary site, Basti Chikitsa is considered a rational first-line Shodhana (purification) approach in classical texts. Kala Basti, being an extended sixteen-day protocol, allows sufficient repeated exposure to both Anuvasana and Niruha Bastis to address a moderately chronic presentation of Gridhrasi, in contrast to the shorter Yoga Basti, which is

often reserved for milder or first-time presentations. Clinicians frequently combine Kala Basti with adjuncts such as local application of medicated oil (Abhyanga), fomentation (Sweda), oral Vata-Kapha pacifying formulations, or procedures such as Agnikarma (therapeutic thermal cauterisation), tailored to the constitution, Dosha predominance, and severity of the individual patient.

10. Review of Clinical Evidence

Published literature specifically evaluating the Kala Basti protocol in Gridhrasi comprises one comparative clinical study of 30 patients and six single case reports. These are summarised in Table 4. Studies employing other Basti schedules, such as Yoga Basti or Karma Basti, or other procedures, such as Kati Basti or Niruha Basti administered independently of a defined Kala Basti schedule, are discussed separately in Sections 5 and 7 for conceptual and formulation-level context, but have been excluded from this table as they do not specifically evaluate the Kala Basti protocol.

Table 4: Clinical studies evaluating Kala Basti in the management of Gridhrasi (sciatica).

Author / Study	Study design	Intervention	Key outcome
Sharma A, Makodiya A, Ramani H, Ruparel S, 2022 (comparative study)	Gridhrasi (sciatica); comparative clinical study, 30 patients allocated to two groups of 15	Group A received Kala Basti (Nirgundi taila as Anuvasana Basti and Erandamoola kwatha as Niruha Basti) followed by Nirgundi ghana vati; Group B received Kati Basti followed by the same oral formulation	Complete remission was observed in 13.3% of patients, marked improvement in 13.3%, moderate improvement in 40%, and mild improvement in 33.3%. The Kala Basti group demonstrated superior overall outcomes relative to Kati Basti, particularly among patients with Vata-Kaphaja Gridhrasi
Case report, 43-year-old male (single case study)	Gridhrasi (sciatica); single case study, with study keywords specifying management through Kala Basti and Shamana Chikitsa	A 16-day Kala Basti schedule employing Dashamoola-based Niruha Basti, administered alongside Kati Basti, Patra Pinda Pottali Sweda, and adjunct Shamana Chikitsa	A satisfactory symptomatic outcome was reported at one-month assessment, with an overall improvement in the patient's quality of life
Case study, 55-year-old male (MRI-confirmed Gridhrasi)	Gridhrasi (sciatica); single case study in a patient with radiologically confirmed disc desiccation and diffuse disc bulge at L3-	One course of Kala Basti using Bala taila as Anuvasana Basti and Erandamoola kwatha as Niruha Basti, combined	Marked clinical improvement was reported following the Kala Basti-based protocol, supporting its applicability even in cases

	L4 and L4-L5, with associated nerve root compression	with Patra Pinda Sweda and Prishtha Basti using Dashamoola taila, alongside internal medication	with radiologically confirmed structural disc pathology
Tyagi S, et al., 2023 (case report, AYUSHDHARA)	Gridhrasi (sciatica); single case report, 55-year-old male with an atypical presentation radiating from the heel to the low back	A combined protocol comprising Siravyadha (venesection), Sadyovirechana (same-day purgation), Kala Basti, Choorna Pinda Sweda, Kati Basti, Kati Bandha, and Snigdha Agnikarma, continued for 11 days	A satisfactory symptomatic outcome was observed at eleven days, with significant overall improvement in the patient's quality of life, supporting the applicability of Kala Basti even in atypical presentations of Gridhrasi
Case report, Journal of Natural Remedies, 2025	Gridhrasi (sciatica); single case report, 38-year-old female with radiating lumbar pain and bilateral tingling	External Snehana with Vishagarbha taila, Kati Basti with Mahamashadi taila, and Kala Basti using Panchatikta Ksheera as the medicated enema	Symptomatic improvement was reported following the combined Shamana and Basti Chikitsa protocol, with reduction in pain and improved mobility

11. Probable Mode of Action

From an Ayurvedic standpoint, Kala Basti is understood to act by pacifying aggravated Vata at its primary seat in the colon, thereby normalising Vata function throughout the body, including in the Kati-Uru-Jangha region affected in Gridhrasi. The Anuvasana component is thought to lubricate and nourish local tissues, while the Niruha component is thought to cleanse obstructed channels and relieve associated Kapha involvement. From a contemporary physiological perspective, several mechanisms have been proposed to explain the clinical benefit observed with medicated Basti therapy.

- Absorption of therapeutically active constituents of the decoction and oil through the rectal mucosa, providing systemic and possibly local anti-inflammatory and analgesic effects.
- Reflex modulation of pelvic and lumbosacral neuromuscular tone through rectal and pelvic floor stimulation.
- Local anti-inflammatory and analgesic actions of the herbal ingredients commonly used, such as Erandamoola, Dashamoola, and Nirgundi.
- A general muscle-relaxant and lubricating effect of retained oil on the lower spine and hip musculature, potentially reducing secondary muscle spasm that contributes to pain.
- Possible improvement in local microcirculation and reduction of perineural inflammation around the compressed or irritated nerve root, though this remains largely hypothetical and unconfirmed by direct imaging or biomarker studies.

These mechanistic explanations remain largely hypothetical and would benefit from dedicated pharmacological, physiological, and imaging-based investigation to establish a firmer bridge between the classical Ayurvedic rationale and contemporary biomedical understanding.

12. DISCUSSION

The clinical literature reviewed here indicates that Kala Basti, whether used alone or combined with adjunct Ayurvedic procedures such as Agnikarma or oral Shamana therapy, is associated with meaningful improvement in pain, straight-leg-raise angle, and functional mobility in patients with Gridhrasi. This is consistent with the classical positioning of Basti as the principal treatment for Vata disorders and with the intermediate, moderate-to-chronic indication assigned specifically to the Kala Basti schedule. The reported outcomes are broadly comparable in direction, though not necessarily in magnitude, to outcomes described with conservative management of sciatica in the biomedical literature, where a substantial proportion of patients also improve without surgery, raising the question of how much of the observed benefit reflects the natural history of the condition versus a specific therapeutic effect of Basti.

The classification of Gridhrasi into Vataja and Vata-Kaphaja types, and the corresponding selection of formulations with or without additional Kapha-pacifying ingredients, illustrates a degree of individualisation that is characteristic of Ayurvedic practice but difficult to standardise for research purposes. This individualisation may partly explain the heterogeneity seen across studies in formulation, dosage, and duration, and represents both a strength, in terms of tailoring therapy to the patient, and a limitation, in terms of reproducibility and comparability across trials.

13. Limitations of Existing Evidence

- Evidence specific to Kala Basti in Gridhrasi is limited to one comparative clinical study and a small number of case reports, with no randomised controlled trial specific to this exact protocol.
- Case reports, by design, cannot establish causality or rule out spontaneous improvement, placebo response, or the contribution of concurrent adjuncts such as Agnikarma, Siravyadha, or Shamana Chikitsa.

- The single comparative study had a modest sample size (30 patients across two groups) and compared Kala Basti with Kati Basti rather than with an inactive or standard-care control.
- Lack of standardisation in Basti formulation, dosage, and duration even within this small set of Kala Basti-specific studies, as well as considerable variation in adjunct therapies used alongside Kala Basti. A systematic review of Niruha Basti formulations in Gridhrasi more broadly reported a similar lack of standardised outcome measures across the wider literature.
- Inconsistent or absent use of validated, blinded outcome scales, and no placebo or sham-Basti comparison group in any of the identified studies.
- Short follow-up periods, with limited data on long-term recurrence or durability of benefit specific to Kala Basti.
- Limited mechanistic or pharmacokinetic data on rectal absorption and systemic bioavailability of the herbal constituents used in Kala Basti formulations.

14. Future Directions

Future research on Kala Basti in Gridhrasi would benefit from multi-centre, adequately powered, randomised controlled trials comparing standardised Kala Basti protocols against active conservative management and against sham or placebo Basti where feasible. Standardisation of Basti formulation, volume, retention time, and administration technique, along with pre-registration of study protocols, would improve comparability across trials. Use of validated outcome measures, such as the Visual Analogue Scale for pain, straight-leg-raise angle, and validated functional disability indices, together with adequate follow-up to assess recurrence, would strengthen the evidence base. Mechanistic studies examining rectal absorption, systemic bioavailability, and local anti-inflammatory effects of key Basti ingredients would help clarify the biological plausibility of the observed clinical benefit.

15. CONCLUSION

Kala Basti, a sixteen-day Panchakarma protocol alternating Anuvasana and Niruha Basti, is grounded in the classical Ayurvedic understanding of Gridhrasi as a Vata-predominant, or Vata-Kapha-predominant, disorder and is indicated specifically for its moderate to chronic presentations. Formulations used within this protocol, such as those based on Erandamoola, Dashamoola, and Nirgundi, are supported by classical pharmacological rationale and, to a more limited extent, by contemporary pharmacognosy literature. Available clinical studies,

though largely small in scale and methodologically heterogeneous, consistently report improvement in pain and functional parameters following Kala Basti and related Basti protocols in patients with sciatica. Given the methodological limitations of the current evidence, well-designed randomised controlled trials with standardised protocols and validated outcome measures are warranted to establish the efficacy, safety, and place of Kala Basti within the broader, integrative management of sciatica.

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