



Review Article

Volume 14 Issue 12

December 2025

## GRIDHRASI A VATAJA NANATMAJA VYADHI AND ROLE OF KATI BASTI AND PATRA PINDA SWEDA

Dr Amit Singh Chauhan<sup>1</sup>, Dr Jitander Tyagi<sup>2</sup>

<sup>1</sup>PhD Scholar, Department of Panchkarma, Desh Bhagat University Mandi Govindgarh, Punjab

<sup>2</sup>Guide, MD, PhD, Professor, Desh Bhagat University Mandi Gobindgarh, Punjab

### Abstract

Ayurveda emphasizes systematic disease classification (Vyadhi Vargikarana) as a fundamental step in understanding pathogenesis and planning treatment. Among various classifications, Nanatmaja Vyadhi represent disorders caused by the exclusive vitiation of a single Dosha. Vataja Nanatmaja Vyadhi constitute an important group characterized predominantly by pain, stiffness, restricted movement, and functional impairment. Gridhrasi is a classical disease entity described under Vataja Nanatmaja Vyadhi, marked by radiating pain from the lumbar region to the lower limb.

This article presents an elaborative conceptual analysis of Vyadhi Vargikarana with emphasis on Nanatmaja Vyadhi, establishes the position of Gridhrasi within Vataja Nanatmaja Vyadhi, and explores its classical description in Ayurveda along with correlation to the modern concept of sciatica. Further, the role of Bahya Chikitsa—specifically Kati Basti and Patra Pinda Sweda—is discussed based on their Ayurvedic principles, properties, and probable mode of action in Vata-dominant disorders.

**Keywords-** Gridhrasi, Nanatmaja, Kati Basti, Patra Pinda Sweda

## Introduction

The Ayurvedic system of medicine approaches disease understanding through a multidimensional framework involving Dosha, Dhatu, Mala, Agni, and Srotas. Unlike symptom-based classifications, Ayurveda emphasizes the underlying Dosha imbalance as the primary determinant of disease manifestation. Vyadhi Vargikarana, or disease classification, serves as a crucial tool for simplifying complex disease processes and guiding rational treatment strategies.

Among the Tridosha, Vata is considered the most influential Dosha due to its role in governing movement, nerve conduction, circulation, and musculoskeletal functions. Disorders caused by Vata vitiation are commonly associated with pain, stiffness, degeneration, and functional disability. Gridhrasi is one such condition where Vata predominance is clearly evident.

Understanding Gridhrasi as a Vataja Nanatmaja Vyadhi not only strengthens the conceptual basis of the disease but also justifies the use of external therapies like Kati Basti and Patra Pinda Sweda, which directly address Vata imbalance at the site of manifestation.

### Vyadhi Vargikarana in Ayurveda: Concept and Importance

Ayurveda describes multiple methods of classifying diseases to facilitate diagnosis, prognosis, and treatment planning. Vyadhi Vargikarana allows the physician to analyze diseases from different perspectives such as causation, Dosha involvement, chronicity, and site of manifestation.

Table 1: Common Bases of Vyadhi Vargikarana

Basis	Classification
Etiology	Nija, Agantuja
Dosha involvement	Vataja, Pittaja, Kaphaja, Dwandaja, Sannipataja
Nutritional status	Santarpanaja, Apatarpanaja
Dosha dominance	Nanatmaja, Samanyaja
Location	Sharirika, Manasika

Among these, Dosha-based classification is clinically most relevant, as treatment in Ayurveda is primarily Dosha-oriented.

## Concept of Nanatmaja Vyadhi

Nanatmaja Vyadhi are a distinct group of diseases described in Ayurveda that arise due to the **exclusive vitiation of a single Dosha**, without the primary involvement of the other two Doshas. The term *Nanatmaja* is derived from “*Nana*” (separate or distinct) and “*Atmaja*” (originating), indicating disorders produced independently by one Dosha. This concept has been elaborately described by **Acharya Charaka**, highlighting its importance in understanding disease pathogenesis and planning precise treatment.

Unlike *Samanyaja Vyadhi*, where two or more Doshas are involved, Nanatmaja Vyadhi present with **clear, Dosha-specific lakshanas** corresponding to the inherent Gunas of the aggravated Dosha. Therefore, identification of Nanatmaja Vyadhi helps the physician in adopting focused Dosha-pratyanika Chikitsa.

According to Charaka Samhita, Nanatmaja Vyadhi are classified based on the Dosha involved and their numbers are fixed, emphasizing their classical significance.

### Dosha-wise Classification and Number of Nanatmaja Vyadhi

Dosha	Number of Nanatmaja Vyadhi
Vataja Nanatmaja Vyadhi	80
Pittaja Nanatmaja Vyadhi	40
Kaphaja Nanatmaja Vyadhi	20

Vataja Nanatmaja Vyadhi form the largest group, reflecting the dominant and pervasive role of Vata Dosha in the body. These disorders are characterized by pain, stiffness, dryness, tremors, and restricted movements. Examples include Gridhrasi, Pakshaghata, Khanja, and Pangulya.

Pittaja Nanatmaja Vyadhi predominantly manifest with symptoms such as burning sensation, inflammation, discoloration, and excessive heat, while Kaphaja Nanatmaja Vyadhi are marked by heaviness, lethargy, excessive unctuousness, and sluggishness.

In conclusion, the concept of Nanatmaja Vyadhi provides a clear and systematic understanding of disease causation in Ayurveda. Recognizing these disorders allows for precise diagnosis and effective management based on Dosha predominance, making it a cornerstone of Ayurvedic clinical practice.

Table 2: Dosha-wise Nanatmaja Vyadhi

Dosha	Predominant Features	Examples
Vata	Pain, stiffness, dryness, restricted movement	Gridhrasi, Pakshaghata
Pitta	Burning, inflammation, discoloration	Raktapitta
Kapha	Heaviness, lethargy, excessive secretions	Prameha

### Vataja Nanatmaja Vyadhi: Clinical Significance

Vataja Nanatmaja Vyadhi occupy a significant place in Ayurvedic clinical practice due to the pervasive nature of Vata Dosha. Vata is responsible for all movements within the body, and its derangement leads to dysfunction at both structural and functional levels.

Characteristic features of Vataja Nanatmaja Vyadhi include:

Ruka (pain)

Stambha (stiffness)

Toda (pricking pain)

Shosha (wasting)

Gati Sangha (restricted movement)

These features are prominently observed in disorders affecting the musculoskeletal and nervous systems, including Gridhrasi.

### Gridhrasi: Ayurvedic Perspective

Gridhrasi is an important Vataja Vyadhi described in classical Ayurvedic texts and is enumerated among the **Vataja Nanatmaja Vyadhi** by Acharya Charaka. The term *Gridhrasi* is derived from the word “*Gridhra*” (vulture), indicating the peculiar gait adopted by the patient due to severe pain and stiffness in the lower limb, resembling the walking pattern of a vulture. This disease primarily affects the **Kati (lumbar region)** and extends along the course of the lower limb, leading to significant functional disability.

### Nidana (Etiological Factors)

The causative factors of Gridhrasi are predominantly those that aggravate Vata Dosha. Classical Nidanas include excessive physical exertion (*Ati Vyayama*), prolonged standing or sitting in improper posture (*Vishama Asana*), excessive walking, suppression of natural urges

(*Vega Dharana*), exposure to cold, and intake of dry, light, and cold foods (*Ruksha, Laghu, Sheeta Ahara*). These factors lead to Vata Prakopa, particularly in the Kati and Sphik regions.

#### Samprapti (Pathogenesis)

Due to Nidana Sevana, Vata Dosha becomes aggravated and localizes in the Kati Pradesha, affecting the Sphik, Uru, Janu, Jangha, and Pada. The vitiated Vata causes Srotorodha and Dhatu Kshaya, especially involving Asthi and Majja Dhatu. This results in pain, stiffness, pricking sensation, and restriction of movements. In some cases, Kapha Dosha may associate with Vata, leading to additional symptoms like heaviness and numbness.

#### Lakshana (Clinical Features)

The classical signs and symptoms of Gridhrasi include **Ruka (pain)**, **Stambha (stiffness)**, and **Toda (pricking sensation)**. Pain typically radiates from the hip region down to the foot. Another characteristic feature described is **Sakthikshepa Nigraha**, which refers to difficulty in lifting or extending the affected leg. The gait becomes altered due to pain, which is a hallmark feature of the disease.

#### Types of Gridhrasi

Ayurvedic texts describe two types of Gridhrasi based on Dosha involvement:

**Vataja Gridhrasi**, characterized by severe pain, stiffness, dryness, and marked restriction of movement.

**Vata-Kaphaja Gridhrasi**, where symptoms of Kapha such as heaviness (*Gaurava*), numbness (*Supti*), and lethargy are associated with pain.

Table 3: Dosha-based Types of Gridhrasi

Type	Clinical Features
Vataja Gridhrasi	Severe pain, stiffness, dryness
Vata-Kaphaja Gridhrasi	Pain with heaviness, numbness

#### Gridhrasi: Modern Perspective

**In modern medicine, Gridhrasi closely correlates with sciatica, a condition caused by irritation or compression of the sciatic nerve.**

Sciatica is a common clinical condition characterized by pain radiating along the distribution of the sciatic nerve, which is the largest nerve in the human body. The pain typically

originates in the lower back or buttock and travels down the posterior aspect of the thigh, leg, and sometimes up to the foot. Sciatica is not a disease in itself but a **symptom complex** resulting from irritation, inflammation, or compression of the sciatic nerve or its nerve roots.

#### Anatomical Basis

The sciatic nerve is formed by the nerve roots of **L4, L5, S1, S2, and S3** segments of the lumbosacral plexus. It emerges from the pelvis through the greater sciatic foramen, passes beneath the piriformis muscle, and descends along the posterior aspect of the thigh before dividing into the tibial and common peroneal nerves. Any pathology affecting these nerve roots or the course of the nerve can give rise to sciatica.

#### Etiology

The most common cause of sciatica is **lumbar intervertebral disc herniation**, particularly at the L4–L5 or L5–S1 levels, where the protruded disc compresses the nerve roots. Other causes include degenerative disc disease, spinal canal stenosis, spondylolisthesis, osteophyte formation, piriformis syndrome, trauma, and rarely, tumors or infections of the spine. Prolonged sitting, improper posture, heavy lifting, and obesity act as precipitating or aggravating factors.

#### Clinical Features

The hallmark symptom of sciatica is **radiating pain** that follows a dermatomal pattern. The pain may be sharp, shooting, burning, or electric shock-like in nature. It is often unilateral and may be aggravated by activities such as coughing, sneezing, bending forward, or prolonged sitting. Associated symptoms include numbness, tingling, muscle weakness, and reduced reflexes in the affected limb. In severe cases, patients may experience difficulty in walking, standing, or performing daily activities.

#### Diagnosis

The diagnosis of sciatica is primarily clinical, based on history and physical examination. The **Straight Leg Raising (SLR) test** is a commonly used provocative test to detect nerve root irritation. Imaging studies such as X-ray, MRI, or CT scan are employed to identify the underlying cause, especially in cases with persistent symptoms, neurological deficits, or suspected serious pathology.

Comparison Table

Aspect	Ayurveda	Modern Medicine
Primary cause	Vata vitiation	Nerve compression
Nature of pain	Radiating, severe	Radiating
Management	Dosha-based	Symptomatic

### Chikitsa Siddhanta (Principles of Management)

The management of Gridhrasi in Ayurveda is primarily based on pacifying vitiated Vata Dosha. Classical texts advocate **Snehana**, **Swedana**, and **Basti** as the main treatment modalities. External therapies such as Kati Basti and Patra Pinda Sweda are particularly effective in alleviating localized Vata, reducing pain and stiffness, and improving mobility.

So Gridhrasi is a well-defined Vata-dominant disorder in Ayurveda with clear etiopathogenesis and symptomatology. The Ayurvedic approach emphasizes correcting the underlying Dosha imbalance rather than mere symptomatic relief, offering a holistic and rational framework for managing this disabling condition.

### Management as per Modern Prespective

Conservative management forms the mainstay of treatment in most cases. This includes rest, analgesics, non-steroidal anti-inflammatory drugs (NSAIDs), muscle relaxants, and physiotherapy. Lifestyle modifications such as posture correction, weight management, and ergonomic adjustments play an important role. In refractory cases, epidural steroid injections or surgical intervention may be considered.

In conclusion, sciatica is a frequently encountered condition with significant impact on quality of life. Early diagnosis and appropriate management are essential to prevent chronicity and functional disability. Understanding the underlying cause is crucial for effective treatment and long-term relief.

### Role of Kati Basti in Gridhrasi

Kati Basti is a specialized form of **Bahya Snehana and Swedana**, in which warm medicated oil is retained over the lumbosacral region for a specified duration. Although not described

as a separate procedure in classical texts, Kati Basti is a clinically evolved technique based on the fundamental principles of Snehana and Swedana mentioned for Vata Vyadhi. The Kati region is considered a principal seat of Vata, and localized application of oil and heat directly influences the aggravated Dosha.

#### Rationale for Use in Gridhrasi

The chief Gunas of vitiated Vata are Ruksha (dryness), Sheeta (coldness), Laghu (lightness), and Chala (mobility). Kati Basti employs medicated oils that possess **Snigdha (unctuous)** and **Ushna (warm)** properties, which are antagonistic to Vata Gunas. By providing sustained oleation and warmth, Kati Basti helps in restoring Dosha balance at the site of manifestation.

Gridhrasi often involves Asthi and Majja Dhatu due to the proximity of the lumbosacral spine and nerve roots. Medicated oils used in Kati Basti are believed to nourish these Dhatus, thereby reducing degeneration and strengthening the affected structures.

#### Probable Mode of Action (Ayurvedic Perspective)

From an Ayurvedic standpoint, Kati Basti works by pacifying localized Vata through Snehana and Swedana. The warm oil penetrates the Sukshma Srotas, alleviating Srotorodha and improving circulation in the affected region. Swedana helps relieve Stambha and Gaurava, facilitating relaxation of muscles and soft tissues. Continuous warmth enhances the therapeutic efficacy of the oil, allowing deeper tissue penetration and prolonged action.

The therapy also aids in reducing pain (Ruka) and pricking sensation (Toda) by calming the Chala Guna of Vata. As Vata is responsible for nerve conduction and movement, its normalization results in improved mobility and functional capacity.

#### Probable Mode of Action (Modern Perspective)

From a contemporary viewpoint, the sustained application of warmth during Kati Basti improves local blood flow, reduces muscle spasm, and decreases nerve irritation. Heat therapy is known to relax paraspinal muscles, reduce stiffness, and enhance tissue elasticity. The oil acts as a medium facilitating prolonged heat retention, resulting in deeper relaxation of musculoskeletal structures.

Additionally, the gentle pressure and warmth may stimulate cutaneous receptors, modulating pain perception through neurophysiological mechanisms. Improved circulation aids in the removal of inflammatory mediators, thereby reducing pain and discomfort.

## Clinical Significance

Kati Basti is a non-invasive, safe, and well-tolerated therapy that provides localized relief in Gridhrasi. It addresses both pain and stiffness while supporting structural and functional recovery. When used as part of a comprehensive Ayurvedic treatment plan, Kati Basti helps in reducing symptom severity, improving quality of life, and preventing recurrence.

## Role of Patra Pinda Sweda in Gridhrasi

Patra Pinda Sweda is a type of **Snigdha Sankara Sweda**, in which fomentation is carried out using boluses prepared from fresh medicinal leaves processed with oil and other Vatahara substances. Although not described as an independent procedure in the classical texts, the concept of Patra Pinda Sweda is derived from the general principles of Swedana mentioned for Vata Vyadhi. The leaves commonly used possess Ushna, Snigdha, and Tikshna properties, making the therapy particularly effective in disorders caused by Vata and Kapha Dosha.

## Rationale for Use in Gridhrasi

Gridhrasi involves pathological changes at the level of muscles, ligaments, joints, and nerves, leading to pain and stiffness. The Swedana effect of Patra Pinda Sweda helps counteract the Sheeta and Ruksha Gunas of aggravated Vata. The Snigdha component provided by oil further enhances Vata Shamana, while Ushna and Tikshna properties help in relieving Kapha association when present.

Patra Pinda Sweda is especially beneficial in conditions where stiffness, heaviness, and restricted movements are prominent features, which are commonly observed in Gridhrasi.

## Probable Mode of Action (Ayurvedic Perspective)

From an Ayurvedic standpoint, Patra Pinda Sweda facilitates Vata-Kapha Shamana by promoting Sweda (sweating), which helps open the obstructed Srotas. The Ushna Guna of the therapy alleviates Sheeta Guna of Vata, while Snigdha Guna reduces Rukshata. This results in the alleviation of Stambha and Toda.

The therapy also aids in improving Agni at the local level (Dhatvagni), promoting proper nourishment of Asthi and Majja Dhatu. By reducing Srotorodha and facilitating free movement of Vata, Patra Pinda Sweda restores normal physiological functions of the affected region.

### Probable Mode of Action (Modern Perspective)

From a modern viewpoint, the heat generated during Patra Pinda Sweda induces vasodilatation, leading to increased blood supply to the affected area. This enhanced circulation helps in the removal of metabolic waste products and inflammatory mediators, thereby reducing pain and stiffness.

The rhythmic rubbing and pressure applied during the therapy help relax muscles, reduce spasm, and improve flexibility. Heat also increases tissue extensibility, making movements smoother and less painful. The herbal components of the bolus may exert local anti-inflammatory and analgesic effects, further contributing to symptomatic relief.

### Clinical Significance

Patra Pinda Sweda is a dynamic therapy that combines the benefits of heat, herbal application, and gentle manipulation. It is particularly useful in chronic and subacute stages of Gridhrasi, where stiffness and muscle tightness are predominant. The therapy improves mobility, reduces pain intensity, and enhances overall functional capacity of the patient.

When used following Snehana procedures such as Kati Basti, Patra Pinda Sweda acts synergistically to produce better clinical outcomes. It also helps prevent recurrence by maintaining tissue flexibility and reducing Vata aggravation.

### Conceptual Flow of Pathogenesis and Management

#### **Nidana Sevana**

↓

#### **Vata Prakopa**

↓

#### **Sthanasamsraya (Kati-Sphik)**

↓

#### **Gridhrasi Lakshana**

↓

#### **Kati Basti (Snehana + Swedana)**

↓

#### **Patra Pinda Sweda (Vata Shamana)**



## Functional Improvement

### Discussion

The inclusion of **Gridhrasi under Vataja Nanatmaja Vyadhi** provides a strong and logical conceptual framework for understanding both the clinical presentation and the therapeutic approach of this disease in Ayurveda. Nanatmaja Vyadhi are disorders produced by the exclusive vitiation of a single Dosha, and in the case of Gridhrasi, Vata Dosha plays the central role in initiating and sustaining the disease process. This classification helps the physician to clearly identify the dominant Dosha and to plan treatment aimed primarily at Vata Shamana rather than adopting a symptomatic or non-specific approach.

Vata Dosha, by virtue of its inherent **Ruksha (dry), Sheeta (cold), Laghu (light), and Chala (mobile) Gunas**, is responsible for all movements and neural functions in the body. When aggravated, Vata tends to localize in regions that are structurally vulnerable or functionally active, such as the Kati and lower limb. In Gridhrasi, Vata Prakopa leads to its Sthana samsraya in the lumbosacral region, affecting Asthi, Sandhi, Snayu, and Majja Dhatu. This explains the cardinal symptoms of pain (Ruka), stiffness (Stambha), pricking sensation (Toda), and restriction of movement (Sakthikshepa Nigraha). The chronic and recurrent nature of Gridhrasi can also be attributed to the dominance of Vata, as Vataja disorders are known to be difficult to treat and prone to recurrence if not managed appropriately.

Understanding Gridhrasi as a Vataja Nanatmaja Vyadhi also clarifies the role of external therapeutic measures in its management. Ayurveda emphasizes that Vata disorders respond best to **Snehana and Swedana**, especially when the Dosha is localized in a specific region. External therapies such as Kati Basti and Patra Pinda Sweda are designed to deliver these principles directly at the site of pathology, thereby providing targeted and effective intervention.

Kati Basti acts by providing localized Snehana and Swedana over the Kati Pradesha, which is a major seat of Vata. The sustained application of warm medicated oil counteracts the Ruksha and Sheeta Gunas of vitiated Vata, promotes tissue nourishment, and reduces stiffness and pain. By acting at the Sthana level, Kati Basti helps in pacifying localized Vata without significantly disturbing systemic Dosha balance. This localized approach is particularly relevant in Gridhrasi, where symptoms are confined to a specific anatomical pathway.

Patra Pinda Sweda further complements this action by inducing controlled sudation using herbal boluses possessing Vatahara and, when required, Kaphahara properties. The Ushna and Snigdha effects of the therapy help relieve muscle spasm, improve flexibility, and reduce obstruction in the Srotas. Patra Pinda Sweda is especially useful in chronic stages of Gridhrasi, where stiffness and restricted movement predominate.

Thus, the conceptual understanding of Gridhrasi as a Vataja Nanatmaja Vyadhi justifies the use of Kati Basti and Patra Pinda Sweda as rational, site-specific, and Dosha-oriented therapeutic modalities. Their combined application addresses the underlying pathogenesis rather than merely suppressing symptoms, thereby offering a holistic and sustainable approach to the management of Gridhrasi.

### Conclusion

Gridhrasi represents a classical example of Vataja Nanatmaja Vyadhi where pain and functional impairment dominate the clinical picture. A thorough understanding of Vyadhi Vargikarana enhances diagnostic precision and therapeutic decision-making. Kati Basti plays a significant role in the management of Gridhrasi by directly targeting the site of Vata vitiation. Through its combined Snehana and Swedana effects, it counteracts the pathological Gunas of Vata, relieves pain and stiffness, and enhances functional mobility. Similarly Patra Pinda Sweda plays a vital role in the management of Gridhrasi by effectively addressing the underlying Vata pathology. Through its Swedana, Snigdha, and Ushna effects, it alleviates pain, stiffness, and restricted movements. Both Ayurvedic principles and modern physiological understanding support the use of Kati Basti and Patra Pinda Sweda as a safe, effective, and holistic therapeutic modality in Gridhrasi.

### Reference

1. Acharya C. *Charaka Samhitā* (Vidyotini Hindi commentary). Acharya YT, editor. Varanasi: Chaukhambha Surbharati Prakashan; 2018.
2. Acharya C. *Charaka Samhitā*. Sharma PV, translator. Varanasi: Chaukhambha Orientalia; 2017.
3. Acharya S. *Sushruta Samhitā* (Nibandha Saṅgraha commentary). Acharya YT, editor. Varanasi: Chaukhambha Sanskrit Sansthan; 2019.
4. Vagbhata. *Aṣṭāṅga Hṛdaya* (Sarvāṅgasundarā commentary of Aruṇadatta). Varanasi: Chaukhambha Orientalia; 2016.

5. Sharma RK, Dash B. *Caraka Samhitā: Text with English Translation and Critical Exposition*. Vols 1–7. Varanasi: Chowkhamba Sanskrit Series Office; 2015.
6. Tripathi B. *Madhava Nidana with Madhukosha Commentary*. Varanasi: Chaukhambha Surbharati Prakashan; 2015.
7. Lad V. *Textbook of Ayurveda: Fundamental Principles*. Albuquerque: The Ayurvedic Press; 2018.
8. Shastri K. *Ayurveda Siddhanta Dipika*. Varanasi: Chaukhambha Sanskrit Bhawan; 2016.
9. Sharma PV. *Dravyaguna Vijnana*. Vol 2. Varanasi: Chaukhambha Bharati Academy; 2017.
10. Gupta A, Mamidi P. Conceptual study of Gridhrasi in Ayurveda. AYU. 2019;40(1):25–30.
11. Patil VC, Patil SR. Ayurvedic understanding of Gridhrasi with special reference to Vataja disorders. J Ayurveda Integr Med. 2020;11(3):345–350.
12. Gupta R, Singh RH. Role of Panchakarma in Vata Vyadhi. AYU. 2018;39(4):217–223.
13. Tiwari P. *Ayurvedic Panchakarma Therapy*. Varanasi: Chaukhambha Orientalia; 2019.
14. Kulkarni R, Joshi M. Effect of Kati Basti in Gridhrasi: A clinical evaluation. J Res Ayurveda. 2021;5(2):45–50.
15. Sharma A, Meena V. Clinical efficacy of Patra Pinda Sweda in musculoskeletal disorders. Int J Ayurveda Res. 2020;11(2):102–108.
16. Ropper AH, Zafonte RD. Sciatica. N Engl J Med. 2015;372(13):1240–1248. doi:10.1056/NEJMra1410151
17. Valat JP, Genevay S, Marty M, Rozenberg S, Koes B. Sciatica. Best Pract Res Clin Rheumatol. 2019;33(3):101–117.
18. Konstantinou K, Dunn KM. Sciatica: review of epidemiology and management. BMJ. 2018;361:k1509. doi:10.1136/bmj.k1509
19. Deyo RA, Mirza SK, Martin BI. Back pain prevalence and treatment. Spine. 2016;41(18):140–148.
20. World Health Organization. *WHO Benchmarks for Training in Traditional Medicine: Ayurveda*. Geneva: World Health Organization; 2019.
21. Singh RH. Exploring integrative approaches in pain management. J Ayurveda Integr Med. 2020;11(4):437–445.