



AYURVEDIC MANAGEMENT OF CHEMOTHERAPY-INDUCED INSOMNIA WITH YOGA NIDRA AND PADABHYANGA: A CLINICAL CASE REPORT

Dr. Sonal Sharma	Post Graduate Scholar, Department of Swasthavritta and Yoga, Patanjali Bhartiya Ayurvigyan E�am Anusandhan Sansthan, Haridwar, India
Dr. Devinder	Post Graduate Scholar, Department of Shalakya Tantra, Patanjali Bhartiya Ayurvigyan E�am Anusandhan Sansthan, Haridwar, India

ABSTRACT Chemotherapy-induced insomnia (CII) is a debilitating side effect in cancer care, often overlooked yet profoundly impacting recovery, immunity, and quality of life. Conventional sedatives offer transient relief but may cause dependence or residual fatigue. To evaluate the combined effect of Yoga-Nidra and Padabhyanga as integrative therapeutic tools in managing chemotherapy-induced insomnia. A 48-year-old female breast cancer patient came to the OPD of Swasthya Rakshnam of Patanjali Ayurvedic Hospital, Haridwar, experiencing severe insomnia during chemotherapy. The present study explores the role of a combination of Yoga Nidra (guided yogic sleep) and Padabhyanga (Ayurvedic foot massage with Ksheer Bala Taila) as an integrative therapeutic intervention for 4 weeks. Sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI) and Insomnia Severity Index (ISI) before and after the intervention. The patient demonstrated remarkable improvement—PSQI reduced from 18 to 6, and ISI from 21 to 7. Sleep latency, duration, and quality improved, with concurrent reduction in anxiety and fatigue. The synergistic application of Yoga Nidra and Padabhyanga provided significant relief from insomnia and psychological distress in a chemotherapy patient. This integrative approach, rooted in Ayurveda and Yoga, offers a promising non-pharmacological adjunct in oncology care.

KEYWORDS : Chemotherapy, Insomnia, Yoga Nidra, Padabhyanga, Ayurveda, Sleep Quality, Integrative Oncology

INTRODUCTION

Cancer, a multifaceted disease that challenges both body and mind, continues to test the limits of modern medicine. While chemotherapy stands as a cornerstone in cancer management, its triumph is often shadowed by the distressing burden of insomnia—a silent yet pervasive adversary. Chemotherapy-Induced Insomnia (CII) extends far beyond sleepless nights; it disturbs the circadian rhythm, weakens immunity, impairs healing, and deepens emotional distress. For many patients, it becomes a cycle where physical pain and psychological turmoil intertwine, compromising recovery and resilience. Despite its prevalence, CII remains underrecognized and inadequately managed in routine oncology care. Conventional pharmacological interventions—though providing transient relief—often carry the risk of dependency, cognitive dullness, and physiological imbalance. Hence, the quest for a gentle, sustainable, and integrative solution becomes essential.

In this pursuit, Ayurveda and Yogic science illuminate a path of holistic healing that nurtures both the soma (body) and manas (mind). Yoga Nidra, the state of conscious deep sleep, harmonises the parasympathetic response, balances neuroendocrine function, and restores psychological equilibrium. Complementing this, Padabhyanga, the ancient Ayurvedic art of foot massage, pacifies Vata dosha, soothes the nervous system, and grounds the body in relaxation. This study explores the synergistic potential of Yoga Nidra and Padabhyanga as a non-pharmacological, cost-effective, and holistic adjunct in the management of Chemotherapy-Induced Insomnia. By bridging traditional wisdom with contemporary cancer care, it seeks to redefine supportive oncology through the lens of mind-body integration and compassionate healing.

Case Presentation

A 48-year-old female, schoolteacher by profession, was undergoing her third cycle of adjuvant chemotherapy for Stage II B carcinoma of the left breast.

Chief Complaint:

Table 1:- Chief Complaints

S.NO	CHIEF COMPLAINTS	DURATION
1	Frequent awakenings with difficulty resuming sleep	3 Weeks
2	Sleep duration 3-4 hours	
3	Fatigue, anxiety, palpitations, restlessness	

Medical and Emotional Background:

The patient's cancer diagnosis had caused significant emotional trauma, fear of recurrence, and stress about family responsibilities. She had no history of psychiatric illness, thyroid disorder, or prior sleep disturbances.

Table 2: Ayurvedic Examination

Nadi	92/min
Mutra	Peetavarna
Mala	Nirama
Jihva	Lipta
Shabda	Prakruta
Sparsha	Ushna
Druk	Prakruta
Prakruti	VataKapha
Sara, Samhana, Satmya	Madhyama
Aharashakti	Alpa

Table No. 3 General Examination

Pallor	Present
Icterus	Absent
Lymph nodes	Present
Clubbing	Absent
Edema	Absent

Table no. 4 Baseline Assessment:

PSQI	18 (Severe disturbance)
ISI	21 (Severe insomnia)
BP	138/86 mmHg

As per the patient, she has above mentioned symptoms for 3 weeks. She declined hypnotic medication, preferring natural and traditional options. So she came to the Patanjali Ayurvedic Hospital, Haridwar, for better treatment,

METHODS AND MATERIALS

A 4-week integrative therapy protocol was implemented at the Swasthya Rakshanam department OPD.

1. Yoga Nidra

Frequency: 7 sessions per week

Duration: 30 minutes per session

Method: Based on Swami Satyananda Saraswati's protocol — systematic rotation of consciousness, breath awareness, Sankalpa affirmation, and guided visualisation of calm imagery (river, moonlight).

Environment: A quiet room with dim lighting, a gentle instrumental background, and a patient in Shavasana posture.

Objective: Induce deep relaxation and activate parasympathetic dominance.

2. Padabhyanga

Frequency: Every evening

Duration: 20 minutes per session

Oil Used: Ksheer Bala Taila warmed to body temperature.

Technique: Gentle circular and longitudinal strokes on soles, ankles, and Talahrdaya marma, followed by mild wrapping with a warm cloth.

Objective: Soothe Vata dosha, reduce anxiety, and promote sound sleep.

3. Lifestyle Advice:

Avoid caffeine and screen exposure post 8 p.m.

Early dinner with light, warm food (Ksheera and Moong dal khichdi).

Evening 10-minute deep breathing (Anuloma-Viloma) before sleep.

Clinical Observations and Results

Within 10 days, the patient reported reduced restlessness and easier initiation of sleep. By week 3, she was able to sleep 6–7 hours continuously with improved morning freshness and stable mood.

Table No. 5: Objective Improvements

Parameter	Before	After 4 Weeks	Change
Sleep duration (hours/night)	3–4	6–7	+3 hours
Sleep latency (minutes)	45–60	15	Improved
Night awakenings	2–3	0–1	Improved
Daytime fatigue	Severe	Mild	Improved

Table NO. 6 :- PSQI Domain-Wise Scores

Component	Before	After 4 Weeks
Subjective Sleep Quality	3	1
Sleep Latency	3	1
Sleep Duration	3	1
Habitual Sleep Efficiency	2	1
Sleep Disturbances	3	1
Use of Sleep Medication	0	0
Daytime Dysfunction	4	1
Total PSQI	18	6

Table no 7:- ISI Domain-Wise Scores

Parameter	Before	After 4 Weeks
Sleep Onset Difficulty	4	1
Sleep Maintenance Difficulty	4	1
Early Morning Awakening	3	1
Sleep Dissatisfaction	4	1
Daytime Interference	3	1
Noticeability by Others	2	1
Distress Level	1	1
Total ISI	21	7

Interpretation:

The reduction in PSQI (18→6) and ISI (21→7) confirms transition from severe to subthreshold insomnia, indicating clinically significant improvement.

DISCUSSION

This case exemplifies the biopsychosocial and Ayurvedic harmony achieved through Yoga Nidra and Padabhyanga. Yoga Nidra shifts brain activity from beta to alpha-theta frequencies, correlating with relaxation and emotional stabilisation. Studies show increased melatonin and reduced cortisol, supporting sleep initiation and continuity. Padabhyanga, by stimulating plantar mechanoreceptors and marma sthanas, promotes parasympathetic activity and balances Vata dosha, classically associated with Anidra (insomnia). From a neurophysiological perspective, the interventions downregulate the hypothalamic-pituitary-adrenal (HPA) axis, reducing stress-driven arousal. From an Ayurvedic view, they restore dhatusaumyata (mental calmness) and Vata shama (grounding). The sustained effect observed even during continuing chemotherapy suggests deep-rooted neurochemical and psychological modulation rather than transient relaxation.

CONCLUSION

This case highlights the transformative potential of integrating Yoga Nidra and Padabhyanga into oncology care. The interventions not only improved sleep quality but also alleviated anxiety, stabilised mood, and enhanced the patient's sense of inner peace amidst cancer therapy. Given their safety, affordability, and holistic nature, these modalities deserve inclusion as standard adjuncts in integrative cancer management. Larger clinical trials can further validate their efficacy and optimise practice protocols.

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