

A Retrospective Case Series on Management of Nidranasha with Yoga Nidra and Padabhyanga

Rajalekshmy PR^{1*} , Toshikhane H² , Bagul A³

DOI:10.21760/jaims.10.4.45

^{1*} Rajalekshmy PR, PhD Scholar, Dept of Swasthavritta and Yoga, Parul Institute of Ayurved, Parul University, Vadodara, Gujarat, India and Associate Professor, Dept of Swasthavritta and Yoga, Ayurveda College, Sulur, Coimbatore, Tamil Nadu, India.

² Hemant Toshikhane, Dean and Principal, Parul Institute of Ayurved, Parul University, Vadodara, Gujarat, India.

³ Aparna Bagul, Professor, Dept of Swasthavritta and Yoga, Parul Institute of Ayurved, Parul University, Vadodara, Gujarat, India.

Sleep is an inevitable factor in day-to-day life. Sleep disturbances reduce the peace of mind and productivity of a person. Many allopathic drugs are available to induce sleep but that all results in various side effects. Yogic interventions are easy to administer and without any adverse effects, hence as an effort towards this, a trial was done at Parul Ayurved Hospital upon the patients of Nidranasha with the practice of Yoga Nidra and Padabhyanga over a period of 30 days. Marked improvement was noted in the sleep parameters of the patients and the discussion of six cases of Nidranasha is done in the case series.

Keywords: Pittsburgh Sleep Quality Index, Sleep efficiency, Yoga Nidra, Padabhyanga, Insomnia disorder

Corresponding Author	How to Cite this Article	To Browse
Rajalekshmy PR, PhD Scholar, Dept of Swasthavritta and Yoga, Parul Institute of Ayurved, Parul University, Vadodara, Gujarat, India and Associate Professor, Dept of Swasthavritta and Yoga, Ayurveda College, Sulur, Coimbatore, Tamil Nadu, India. Email: dr Rajalekshmypr@gmail.com	Rajalekshmy PR, Toshikhane H, Bagul A, A Retrospective Case Series on Management of Nidranasha with Yoga Nidra and Padabhyanga. J Ayu Int Med Sci. 2025;10(4):297-304. Available From https://jaims.in/jaims/article/view/4160/	

Manuscript Received
2025-03-08

Review Round 1
2025-03-25

Review Round 2
2025-04-05

Review Round 3
2025-04-15

Accepted
2025-04-25

Conflict of Interest
None

Funding
Nil

Ethical Approval
Not required

Plagiarism X-checker
11.65

Note



© 2025 by Rajalekshmy PR, Toshikhane H, Bagul A and Published by Maharshi Charaka Ayurveda Organization. This is an Open Access article licensed under a Creative Commons Attribution 4.0 International License <https://creativecommons.org/licenses/by/4.0/> unported [CC BY 4.0].



Introduction

Sleep is a universal need of all life forms including human beings. A person spends 1/3rd of his life in sleep. Just like food, water and air, sleep is also very much essential for life. Sound restorative sleep is foundation of a healthy life. Without enough sleep, one cannot focus and pay attention or respond quickly. Sleep deprivation is linked to an increased risk of metabolic syndrome, diabetes, cardiovascular disease, infections, and mood disorders. Sleep deprivation is also linked to a drop in sleep quality. According to available data, about 150 million people in developing countries are sleep deprived. Over next nearly two decades, more than 260 million people will have some sort of sleep disturbance. Sleeplessness affects between one-third and fifty percent of adults, according to estimates. An estimated 20% of Indians have difficulties sleeping. In India, 6.5% of women and 4.3% of men have chronic sleep problems caused by a range of illnesses. There haven't been many studies in India that look at India's popularity among individuals of various ages and genders. According to Panda et al. study's on incidence of sleep-related problems in healthy population of South Indian states, insomnia was reported by 18.6% of patients, 18% for sleep onset, 18% for sleep maintenance, and 7.9% for early morning awakening. The study included 1050 attendants/relatives of patients who looked to be in good health at a tertiary care hospital. This sample's average age was 35.1 ± 8.8 years. The average age of population was 35.1 ± 8.7 years. According to report, 42% of general population has hypertension. Suri et al. conducted a series of questionnaire-based assessments with people of various ages in Delhi. 28.1% of 2,475 people between ages of 30 and 60 had symptoms suggestive of sleep-onset and -maintenance disorders. In another study, same group of researchers reported that 59 percent of 1,240 seniors had insomnia, which is generally characterised by difficulty sleeping or staying asleep once asleep.[1,8] Insomnia may be correlated with *Nidrānāsha* in *Ayurvedic* classics. Nowadays, due to altered lifestyles, busy schedule and stressful living conditions, *Nidrānāsha* have become a major problem worldwide. *Abhyāñga* is advocated as a routine in our classics, emphasizing its special influence on sleep and *Vata Dosha*. *Ayurveda* classics give direct refe. on influence of *Padabhyanga* in inducing sleep.

Yoga shastra advises the practice of guided meditation called *Yoga Nidra* for deep physical and mental relaxation. The currently available therapies and drugs for insomnia are not only costly, but also usually dangerous due to their side effects. Several over-the-counter sleeping medicines, as well as prescription benzodiazepines, non-benzodiazepines, melatonin, antidepressant, and antihistamine treatments, have been associated with tolerance, dependence, and even addiction in certain users. *Nidranasha* therapy approaches that are risk-free, effective, straightforward, time- and cost-efficient, and create no negative side effects have been in high demand for quite some time. This study aims to determine whether combining *Padbhyaga* with *Yoga Nidra* is useful in putting *Nidra* under control. [9]

Aim and Objectives

Insomnia is one of the commonest problems faced by the working community and sometimes they are forced to depend upon medications for improving their quality of life. So, a cost effective and easy technique need to be framed so that the sleep disturbances can be removed and productivity can be increased. In the present case series, the synergetic effects of both treatment modalities are analyzed inorder to devise a treatment package that can guarantee a sustainable cure for the patients.

Materials and Methods

Study design

Patients of insomnia attending the OPD of Parul Ayurved Hospital who are coming under the inclusion criteria will be selected for the study.

Diagnostic criteria: Patients with sleep disorders will be diagnosed for insomnia disorder DSM-V diagnostic criteria. The criteria include

- Unhappiness with one's sleep because of problems getting to sleep, staying asleep, or falling back to sleep after being awakened too early.
- This sleep disorder has a negative effect on the person's day-to-day life, career, and behavioural and emotional health.
- It's been going on for at least three months if you've been sleepless at least three nights a week.

- Despite having plenty of time to get some rest, this problem still hasn't been resolved.
- The difficulty cannot be explained by any other known medical, psychological, or circadian rhythm disorders.
- There is no correlation between substance addiction and the symptom(s) in question.

The general particulars and sleep assessment will be done with predesigned questionnaire and Pittsburgh Sleep Quality Index.

Grouping and Procedure

Particulars	Case One & Two	Case Three & Four	Case Five & Six
Intervention	Padabhyanga	Yoga Nidra	Padabhyanga + Yoga Nidra
Study Duration	30 days	30 days	30 days
Treatment Plan	Padabhyanga - 10-20 ml Tila taila application under feet for 5 minutes before bed time.	Yoga Nidra Session of 30 minutes duration daily for 30 days at night time (5 supervised sessions in morning hrs & 25 self-administered sessions at night time through headphones) Note: for Yoga Nidra sessions, audio instructions of any Bihar School of Yoga will be used commonly for all subjects.	Padabhyanga - 10-20 ml Tila Taila application under feet for 5 minutes before bed time & Yoga Nidra Session of 30 minutes duration daily for 30 days at night time (5 supervised sessions in morning hrs & 25 self-administered sessions at night time through headphones) Note: for Yoga Nidra sessions, audio instructions of Bihar School of Yoga will be used commonly for all subjects.
Assessment & Follow-up	1st assessment - BT 2nd visit - 7th day 3rd visit - 15th day 4th visit - 21st day 5th visit / 2nd assessment - 30th day 1st follow-up - after 60 days	1st assessment - BT 2nd visit - 7th day 3rd visit - 15th day 4th visit - 21st day 5th visit / 2nd assessment - 30th day 1st follow-up - after 60 days	1st assessment - BT 2nd visit - 7th day 3rd visit - 15th day 4th visit - 21st day 5th visit / 2nd assessment - 30th day 1st follow-up - after 60 days

Assessment Criteria

The standard for this analysis will be the Pittsburgh Sleep Quality Index. Subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep interruptions, sleep medication use, and daytime dysfunction are all assessed.

Treatment Review

Ayurveda classics describe various external therapies and internal therapies for *Nidranasha*. The easiest and one that can be daily adopted as a *Dinacharya* practice is *Padabhyanga*. *Acharya Charaka* says by applying oil to the sole of the feet, roughness, immobility, dryness, fatigue and numbness are instantly cured. Strength and steadiness of feet is maintained; eyesight becomes clear and vitiated *Vāta* is relieved thereby.[10]

Ācāryasuśruta says that for inducing sleep, health of the body and eyes, reducing fatigue and inducing softness to the feet, *Pādābhyāṅga* is always beneficial.[11] Of all the varieties, oil of *Tila* (*Sesamum indicum* Linn.) is the most efficacious for the purpose of strength and oleation (Ca. Su. 13/12). *Ācārya Caraka* mentioned that *Tila Taila* is best among the *Taila Vargā* and it is *Vāta Shamaka*. [12]

Yoga Shastra also have various developed *Asanas*, meditation procedure etc. to induce good sleep. One among that technique is *Yoga Nidra*. As far as relaxation techniques go, *Yoga Nidra* is the most well-known. While practicing *Yoga Nidra*, one enters a level of consciousness that is neither asleep nor awake, nor is it a state of intense concentration or hypnosis. An altered state of awareness is one definition. It has been shown via research that *Yoga Nidra* can be utilized as a therapeutic strategy for the treatment of both psychological problems (such as anxiety, hostility, insomnia, etc.) and psychosomatic diseases (such as asthma, coronary heart disease, cancer, hypertension, etc.). The practice of *Yoga Nidra* could be a genuine blessing for humanity in the modern era, when stress and anxiety are on the rise and physical symptoms can manifest in psychological ways.

Eight steps make up a typical *Yoga Nidra* session.

1. Preliminary physical preparation via internalization/relaxation.
2. Affirmation (*Sankalpa*) - The silent proclamation of a personally chosen objective.

3. Consciousness Rotation entails a methodical journey through the physical self.
4. Respiration awareness entails focusing on the breath for a set amount of time while in predetermined bodily positions.
5. The sensation of contrasting emotions and sentiments is common.
6. Visualization in the arts - imagining different archetypal pictures.
7. Repeating the affirmation-*Sankalpa* while in this highly receptive state of mind causes it to get embedded in the brain's unconscious.
8. A mindful and slow readjustment back to normalcy, or full awareness.

Observations

6 patients with sleep disorders diagnosed for insomnia disorder DSM-V diagnostic criteria in age group of 18 – 50 years attending OPD of Parul Ayurved Hospital were selected for study. Case no: 1 & 2 were given *Padabhyanga* with *Tila Taila* for 30 days, case no: 3 & 4 were given *Yoganidra* practice for 30 days & case no: 5 & 6 were given *Padabhyanga* with *Tila Taila* & *Yoganidra* practice for 30 days. The assessment with Pittsburgh Sleep Quality Index is done thrice - before treatment, after treatment & after follow up of one month. The details of patients are listed out in table 1.

Table 1: Patient details

Case No: 1								
OPD No: 20020179		Age/ Gender:30 yrs/Female		Date: 1/12/2020		Treatment plan: Padabhyanga		
	Component 1. Subjective sleep quality	Component 2. Sleep latency	Component 3. Sleep duration	Component 4. Sleep efficiency	Component 5. Sleep disturbance	Component 6.use of sleep medication	Component 7. Daytime dysfunction	Global PSQI score
BT	3	3	3	3	1	0	2	15
AT	2	3	3	3	1	0	2	14
Follow Up	2	2	3	3	1	0	2	13
Case No: 2								
OPD No: 20020238		Age/ Gender: 30 yrs/Male		Date: 2/12/2020		Treatment plan: Padabhyanga		
	Component 1. Subjective sleep quality	Component 2. Sleep latency	Component 3. Sleep duration	Component 4. Sleep efficiency	Component 5. Sleep disturbance	Component 6.use of sleep medication	Component 7. Daytime dysfunction	Global PSQI score
BT	3	3	1	0	1	0	1	9
AT	2	2	1	0	1	0	1	7
Follow Up	2	2	1	0	1	0	1	7
Case No: 3								
OPD No: 20020147		Age/ Gender:37 years/Male		Date: 1/12/2020		Treatment plan: Yoga nidra		
	Component 1. Subjective sleep quality	Component 2. Sleep latency	Component 3. Sleep duration	Component 4. Sleep efficiency	Component 5. Sleep disturbance	Component 6.use of sleep medication	Component 7. Daytime dysfunction	Global PSQI score
BT	3	1	3	3	2	0	3	15
AT	1	1	2	3	1	0	1	9
Follow Up	0	0	1	2	1	0	1	5
Case No: 4								
OPD No: 20020149		Age/ Gender: 30 years/Female		Date: 1/12/2020		Treatment plan: Yoga nidra		
	Component 1. Subjective sleep quality	Component 2. Sleep latency	Component 3. Sleep duration	Component 4. Sleep efficiency	Component 5. Sleep disturbance	Component 6.use of sleep medication	Component 7. Daytime dysfunction	Global PSQI score
BT	3	3	1	0	1	0	2	9
AT	2	2	1	0	1	0	1	7
Follow Up	2	2	1	0	1	0	1	7

Case No: 5								
OPD No: 20020239		Age/ Gender: 31 yrs/ Male		Date: 02/12/2020		Treatment plan: Yoga nidra & Padabhyanga		
	Component 1. Subjective sleep quality	Component 2. Sleep latency	Component 3. Sleep duration	Component 4. Sleep efficiency	Component 5. Sleep disturbance	Component 6.use of sleep medication	Component 7. Daytime dysfunction	Global PSQI score
BT	3	2	1	0	2	0	3	11
AT	0	1	1	0	1	0	1	4
Follow Up	1	1	1	0	1	0	1	5

Case No: 6								
OPD No: 20020237		Age/ Gender: 31 yrs/ Male		Date: 02/12/2020		Treatment plan: Yoga Nidra & Padabhyanga		
	Component 1. Subjective sleep quality	Component 2. Sleep latency	Component 3. Sleep duration	Component 4. Sleep efficiency	Component 5. Sleep disturbance	Component 6.use of sleep medication	Component 7. Daytime dysfunction	Global PSQI score
BT	3	3	1	1	1	0	2	13
AT	1	1	0	0	1	0	0	3
Follow Up	0	1	0	0	1	0	0	2

Results

Patients were assessed with Pittsburgh Sleep Quality Index for improvement of sleep parameters and observed for qualitative changes in each sleep component. No adverse reactions were observed in any of the patients during the course of 30 days. All patients tolerated the treatment well and were comfortable during the administration. There was a marked improvement in the sleep quality levels of all patients and a steady improvement was observed over 30 days of treatment. No patients who completed the study were observed to have deteriorated during or after the course. The parameters are depicted in the charts below:

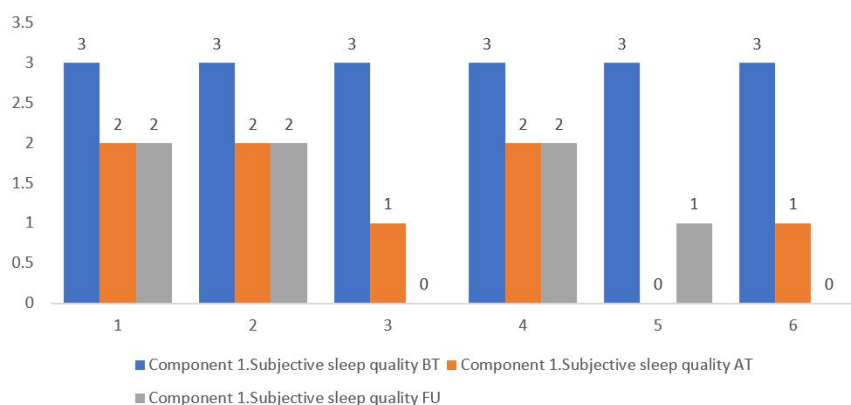


Figure 1: Component 1: Subjective sleep quality

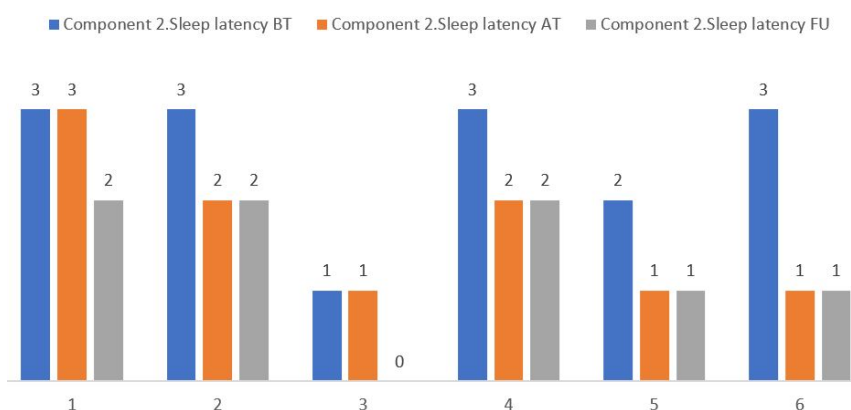


Figure 2: Component 2: Sleep latency

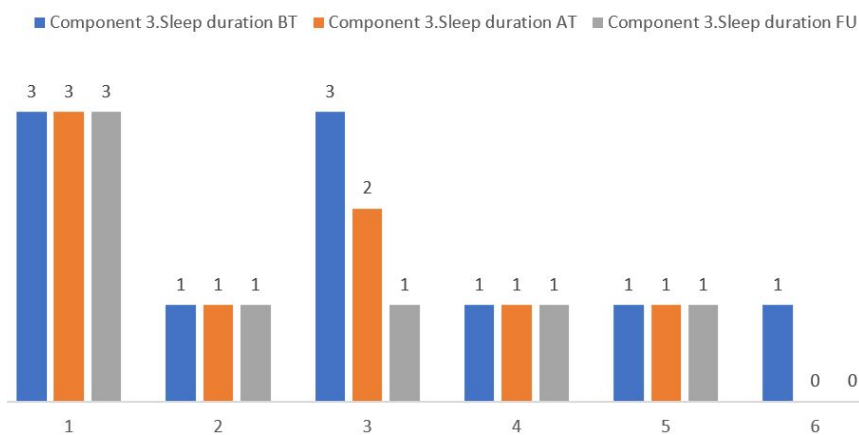


Figure 3: Component 3: Sleep duration

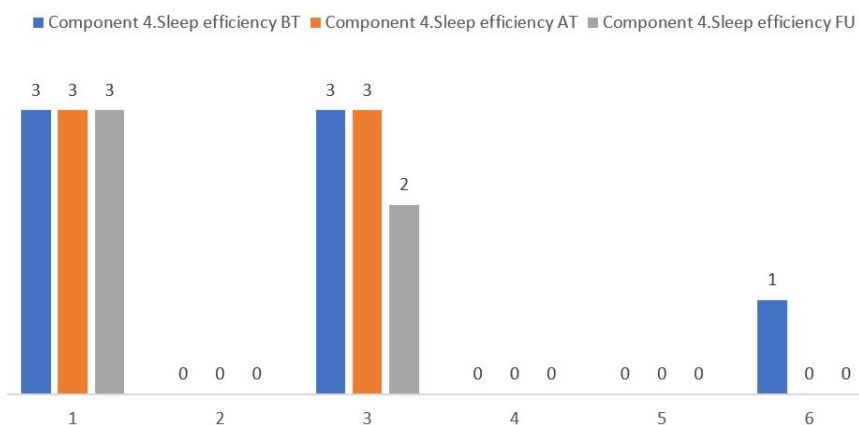


Figure 4: Component 4: Sleep efficiency

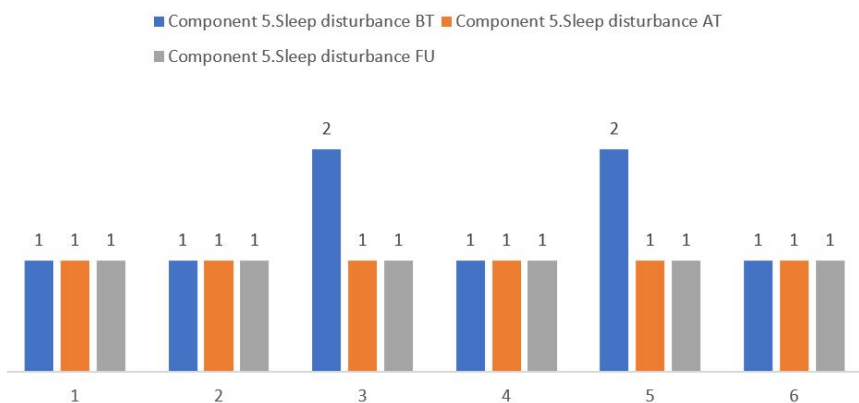


Figure 5: Component 5: Sleep disturbance

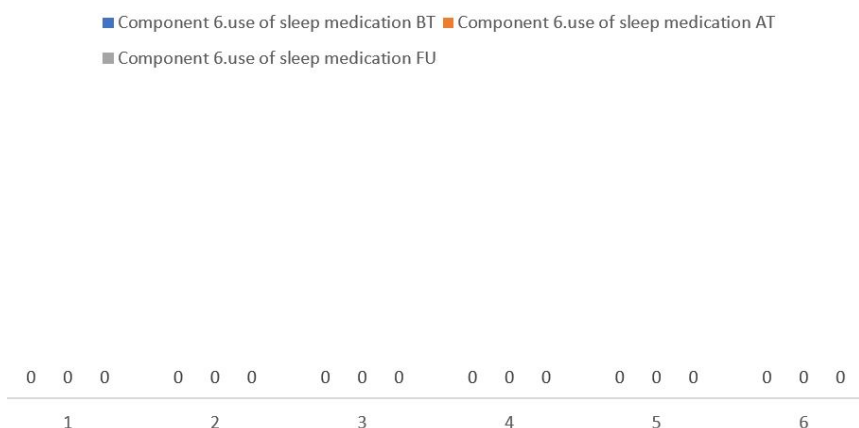


Figure 6: Component 6: Use of sleep medication

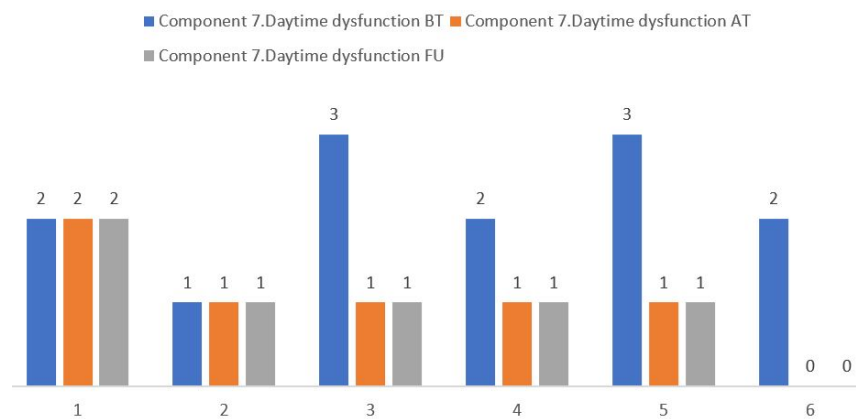


Figure 7: Component 7: Daytime dysfunction

Discussion

The PSQI is a 19-item self-reported questionnaire designed to evaluate sleep quality and disruption during the past month. It is applicable to clinical populations. 19 elements can be divided down into 7 categories, including sleep duration, sleep interruption, sleep latency, daytime dysfunction owing to fatigue, sleep efficiency, overall sleep quality, and the use of sleep medications. Daytime dysfunction owing to fatigue, sleep efficiency, and total sleep quality are additional concerns. One could rank the severity of a sleep disturbance on a scale ranging from 0 to 3, with 3 being the most severe. The overall score, also known as the global score, is calculated by summing the findings of the seven major components of sleep. People with a global PSQI score more than five can be consistently categorised as either good sleepers or poor sleepers. The sensitivity of the PSQI is 89.6% and its specificity is 86.5%.

Sleep latency, or the time it takes to fall asleep, was the only sleep measure that *Padabhyanga* therapy for 30 days was able to significantly alter. In one patient, sleep latency decreased somewhat after 30 days. However, patients reported feeling more at ease and tranquil during sleep after receiving *Padabhyanga*. The effects of *Abhyag* can be achieved in two ways: through direct physical manipulation, and through the medicinal oil itself. *Abhyanga's* mode of action can also be deduced from the characteristics of the *Sneha* employed. It might be said that *Snigdha* and *Guru* perform the functions of *Vatahara*, *Snehana*, *Balya*, and *Pustikara*. When combined with *Teekshna Guna* and *Sukshma Guna*, which aid in the drug's penetration into the minute channel, *Mrudu Guna* can alleviate stiffness.

Massage is a sort of physical manipulation that has been shown to enhance circulation, strengthen the lymphatic system, and aid in the elimination of waste materials from the body. Soothing effects on the muscles and deep connective tissues. *Abhyanga's* strokes stimulate blood flow to the area, relax tense muscles, loosen adhesions in the fascia, and return range of motion to the soft tissues. Modifications in key sleep characteristics were observed following *Yoga Nidra* treatment. The first patient saw considerable improvements in both sleep quality and WASO (Wake time After Sleep Onset). However, sleep disruptions did not improve significantly. Significant improvements were seen in sleep metrics for cases 5 and 6 in which patients received both types of therapy. An increase in parasympathetic activity has been associated with *Yoga Nidra* practise. Quality sleep, both subjectively and objectively, is associated with well-regulated cardiac vagal tone. The dramatic increase in WASO and sleep quality ratings may be explained by the fact that morning yoga practise increases parasympathetic drive at night, leading to more restorative sleep. In PSG for insomnia, the improvement in N3 percent TST after treatment is encouraging. One possible explanation for the improved quality of sleep is an increase in slow wave sleep. There may be a connection between the cognitive structuring effects of these practises and the potential mechanisms that affect sleep quality and subjectively feeling better. Mindfulness meditation is recognised to treat executive attention deficiencies, which are linked to mood and anxiety and psychiatric symptoms, but the processes behind *Yoga Nidra* remain unknown at this time. Reduced sympathetic arousal and calmer emotions are likely responsible for the beneficial effects of mindfulness meditation on insomnia.

Yoga Nidra is an easy-to-use, relatively risk-free, and effective method for combating persistent sleeplessness. The patient is independent of therapist and can practise *Yoga Nidra* on his own after first five supervised sessions. Our patient's confidence and sense of calm increased as a result of this, and his anxiety levels decreased. After just one month of treatment, this may be one of main causes for ongoing relief from anxiety and stress.

Conclusion

The synergetic effects of *Yoga Nidra* and *Padabhyanga* had brought about marked improvement in the sleep parameters as well as created a sense of wellbeing and mental relaxation in the patients within a short span of one month duration. Even though, the exact reason behind the benefits is unknown, the effects attained by the practice are enormous. The study was limited to only six patients; hence a definitive conclusion cannot be generated. But it is evident that the combined package of *Yoga Nidra* and *Padabhyanga* can be administered for chronic insomnia patients.

References

1. Léger D, Pandi-Perumal SR, editors. Sleep disorders – their impact in public health. Bodmin (UK): Informa UK Ltd. ; 2007. Chapter 5. p. 59 [Crossref][PubMed][Google Scholar]
2. U. S. Department of Health and Human Services, National Institute of Health. Healthy sleep. Washington, DC: NIH; 2011. NIH Publication No. 11-5271. p. 1-2 [Crossref][PubMed][Google Scholar]
3. World Sleep Foundation. Global sleeplessness epidemic [Internet]. Available from: http://worldsleepfoundation.org/global-sleeplessness-epidemic_28738. [Crossref][PubMed][Google Scholar]
4. Schutte-Rodin S, Broch L, Buysse D, Dorsey C, Sateia M. Clinical guideline for the evaluation and management of chronic insomnia in adults. J Clin Sleep Med. 2008;4(5):489. Available from: [Article] [Crossref][PubMed][Google Scholar]
5. Insomnia rampant in third world countries: study [Internet]. Health India. [cited 2017 Feb 12]. Available from: <http://www.health.india.com> [Crossref][PubMed][Google Scholar]
6. Panda S, Taly AB, Sinha S, Gururaj G, Girish N, Nagaraja D. Sleep-related disorders among a healthy population in South India. Neurol India. 2012;60:68-74. [Crossref][PubMed][Google Scholar]
7. Suri JC, Sen MK, Adhikari T. Epidemiology of sleep disorders in the adult population of Delhi: a questionnaire-based study. Indian J Sleep Med. 2008;3(4):128-37. [Crossref][PubMed][Google Scholar]
8. Suri JC, Sen MK, Ojha UC, Adhikari T. Epidemiology of sleep disorders in the elderly: a questionnaire survey. Indian J Sleep Med. 2009;4(1):12-18. [Crossref][PubMed][Google Scholar]
9. Tripathi KD. Essentials of medical pharmacology. 6th ed. New Delhi: Jaypee Publications; p. 392 [Crossref][PubMed][Google Scholar]
10. Yadavji Trikamji Ācārya V, editor. Dalhana Virachitaya Suśruta Samhitā. Chikitsa Sthana, 24th chapter, Sloka no. 70. 8th ed. Varanasi: Chowkhamba Orientalia; 2005. p. 490 [Crossref][PubMed][Google Scholar]
11. Yadavji Trikamji Ācārya V, editor. Dalhana Virachitaya Suśruta Samhitā. Chikitsa Sthana, 24th chapter, Sloka no. 70. 8th ed. Varanasi: Chowkhamba Orientalia; 2005. p. 490 [Crossref][PubMed][Google Scholar]
12. Jadavji Trikamji Ācārya V, editor. Caraka Samhitā. Sutrasthana, 27th chapter, Sloka no. 286-288. Reprint ed. Varanasi: Choukambha Sanskrit Sanstana; 2004. p. 169-70 [Crossref][PubMed][Google Scholar]
13. Mar BS. Yoga Nidra and its advantages and application. Munger (India): Bihar School of Yoga; 2001. . [Crossref][PubMed][Google Scholar]

Disclaimer / Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of Journals and/or the editor(s). Journals and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.