

AYURVEDIC MANAGEMENT OF INSOMNIA- A CASE REPORT

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ABSTRACT

Sleep is an active regulated and distinct metabolic state, that controls fundamental biological functions of the body resulting in maintenance and repair of body. Chronic sleep restriction is multifactorial and can be attributed to underlying organic illness, sleep disorders, work demands, social and domestic responsibilities, adversely affecting neurobehavioral functions, impaired daytime functioning, personal conflicts, psychoactive substance abuse disorders. Insomnia is a disorder characterized by difficulty in initiating and maintaining sleep or both and can include frequent awakening during night, early morning awakening or inadequate quality of sleep. According to Ayurveda Nidra is one among the Tripod sustaining life, affecting various functions of physiology which includes psychological wellbeing, status of nourishment, physical strength, endurance, neurocognitive functions, and reproductive health. Nidranasha or

Alpanidra is caused due to increase in Vata & Pitta dosha and reduced Kapha dosha. A 38 year old female approached our OPD her primary concerns being difficulty in getting off to sleep and maintaining since last 6 months, she was diagnosed as a case of Nidranasha based on standard diagnostic protocol and she was put on an Ayurvedic treatment Protocol with Trina Panchamoola Ksheera Sirodhara for 7 days along with Internal administration of Cap. Shwethasankhapushpi 500mg in dose of 2 TID after food for a period of 14 days with add on Sleep Hygiene practices, the protocol was effective in reducing Insomnia.

KEYWORDS: Pittsburgh Sleep Quality Index, Nidranasha, Primary Insomnia.

INTRODUCTION

Sleep is a naturally recurring and reversible biobehavioural state characterized by relative immobility, perceptual disengagement, and subdued consciousness. As a predictable and easily reversible phenomenon, sleep is distinct from states of anaesthesia and coma, which typically involve the absence or suppression of neural activity. Additionally, proper sleep involves a dynamic interaction between voluntary decisions and involuntary biological activities.^[1]

Quality sleep allows for improved cardiovascular health, mental health, cognition, memory consolidation, immunity, reproductive health, and hormone regulation.^[2]

Sleep and wake states are generated by intrinsic neural networks and regulated by circadian mechanisms. The initiation and maintenance of sleep requires the suppression of ascending arousal systems that promote wakefulness. Extracellular adenosine increases throughout the awake period and rising levels signal shifts toward sleep. The adenosine activates inhibitory neurons of the ventrolateral pre-optic area of the brain and serves as a sleep switch.^[3]

DSM-V criteria for Insomnia is: A predominant complaint of dissatisfaction with sleep quantity or quality, associated with one or more of the following symptoms, difficulty initiating sleep, difficulty maintaining sleep, characterized by frequent awakenings or problems returning to sleep after awakenings, early morning awakenings with inability to return to sleep, the sleep difficulty is present for at least 3 months, the sleep disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.^[4]

Studies show worldwide prevalence of Insomnia in 10-30% of population, some even as high as 50%-60%.^[5] Prevalence of sleep related disorders among healthy population from South Indian states, was reported as 18.6%, questionnaire-based studies in Delhi among different age groups. found that 28.1% of the subjects reported to have complaints suggestive of disorders of initiation and maintenance of sleep.^[6]

From an Ayurveda point of view Nidra is defined as a state that happens when manas is dis associated with Indriyas due to sensory fatigue and tiredness of the body, there are physiological and pathological variants of Nidra^[7], Sleep dysfunction in Ayurveda is

diagnosed as Alpanidra or Nidranasha which is caused by disturbance in qualities of Vata and Pitta dosha^[8], decreased state of kapha in the body.^[9]

Treatment For Nidranasha is aimed at restoring normalcy in functioning of Vata and Pitta Dosha through external therapeutic interventions, dietary modifications, and internal medications.^[10]

PRESENTING CONCERNS

A 38 year old female patient attended our OPD she was apparently in normal state of health with no known comorbidities, her primary concerns were loss of sleep, problems with getting off to sleep and maintaining it, she reported near total absence of sleep since 11 months, the health issues started with sudden demise of her husband due to road traffic accident, she was pregnant with her first child during that time, her pregnancy period was stressful. She worked as accountant and there were stressful episodes at her work place due to job responsibilities she used to sleep by midnight and had frequent awakenings during the night, she underwent many hardships in the last 11 months her insomnia gradually worsened over the months.

CLINICAL FINDINGS

General Physical Examination

Pulse rate: 68/min, Left Radial, Normal rhythm full volume, Heart Rate 68/min, S1 S2 Heard, No Murmurs, B.P-110/70 mm Hg Left Arm Sitting, Respiratory Rate: 18/min, No added sounds, Weight -52 Kg, Height-150 cm, BMI-22.2kg/m²

MENTAL STATUS EXAMINATION

The patient was conscious alert oriented to time place and person, moderate built, proper eye contact was maintained during consultation, rapport was easily established, Speech normal rate rhythm, Euthymic Mood and affect normal, comprehension was intact, and motor activity was normal, anxious thoughts, no auditory or visual hallucinations were reported.

AYURVEDIC CLINICAL EXAMINATION

Dashavidhapareeksha following assessments were made

Shareera prakrithi Vata Pitta

Dosha: Vata & Pitta

Desha-Sadharana

Kalam-sharath

Satwa-Madhyama

Vayas-Madhyama

Jarana shakthi-Madhyama

Abhyavaharan shakthi - Madhyama

Srotas-Annavaha(Adhamana), Rasavaham(Anagamarda), Pureeshvaha(Grathitha Pureesha), manovaha srotas(Chinta, Shoka)

Investigations and Medications

CBC, Thyroid function, urine routine were within normal limits, patient was not on any internal medications.

Diagnostic Criteria and Assessment

Considering the detailed history and mental status examination, the case was diagnosed as Primary Insomnia/Insomnia disorder as per DSM-V criteria, Assessment was done using Pittsburgh sleep quality index (PQSI)^[11], Insomnia screening questionnaire & sleep diary, Improvement was noted in the scores after assessment.

Intervention

SL. No	Procedure	Medicine	Timing of Intervention	Duration	Rationale
1	Trinapanchamoola ksheer Dhara	2.5Li./day	In the evening	45 mins x 7 days	Vata Pitta Shamana Nidrajanaka Ojovardhaka Jeevineeya Raasayanam
2	Shankhapushpi Choornam Capsule	500 Mg 2 Cap TID	A/F	14 days	Tridosahara Medhya Manasarogarith.
3	Practise Sleep Hygiene ^[12]			Day 1 Onwards	

DISCUSSION

In Ayurveda Nidra is included under Tripod sustaining life, it helps in promoting health and longevity, healthy practise of sleep results in achievement of happiness, misery, nourishment, emaciation, strength weakness, virility, sterility, knowledge, ignorance. Furthermore, well-balanced Nidra helps in attaining Dhatu-samyath and promotion of strength.^[13]

An equilibrium among Doshas, Agni Dhatu, malas lead to an effective sleep when the homeostasis is disturbed it results in Nidra-nasha, which is included under Nanatamaja

Vikaras of Vata^[14], also Nidranasha is included under Vata vrddhi Lakshana, and Alpanidra included under Pitta vrddhi lakshanas.^[15]

Nidra can be affected in various conditions, it can be a premonitory symptom in diseases like Jwara, can be a symptom of disease like Vata Raktha, can be caused by Vegadharana.

This case of Insomnia can be considered under context under Nidranasha of Vatapitta nature, intervention in this case consisted of Sirodhara with Trina Panchamoola Ksheera kashayam in the evening for a duration of 45 minutes for 7 days, followed by Shankhpushpi choornam capsule 500 mg for 14 days along with sleep hygiene practices.

Trinapanchamoola has madhura kashaya rasa, snigdha slakshana guna, sitavirya, madhura vipaka, these attributes help in pacifying aggravated Vata Pitta^[16], Ksheera is having Rasayana, Medhya, Manaskara properties^[17] which will lead to improvement in functioning of indriyas and Manas resulting in initiation as well as maintenance of sleep.

Shankhpushpi comes under Medhya Rasayana^[18], induces a feeling of calm and peace, good sleep, relief in anxiety, stress, mental fatigue it produces its action by modulation of neurochemistry of brain, helps in balancing Vata and Pitta dosha, is having tiktha rasa Madhura Vipaka.^[19]

The patient was discharged after culmination of protocol with follow up advice of sleep hygiene practise.

Before and after intervention patient was assessed with Pittsburgh Sleep quality index, The PQSI score was reduced from 18 to 5% after the intervention and the sleep efficiency improved from 12.5 to 75 %.

CONCLUSION

Insomnia is a very prevalent chronic disorder in our society coupled with stressors of modern technological age, demanding careers, impaired work life balance it exerts a toll over the psyche, act as a contributory factor for development of other co morbidities, mental illness, affecting professional and personal dimensions of one's life .Modern pharmacological treatments have their own limitations, and behavioural modification therapies act as supportive measures.

Therapeutic interventions in Ayurveda includes dietary modification, pharmacological therapy, external therapeutic procedures, bio purificatory measures that can be employed in cases of Insomnia based on requirements, in this case report significant changes were observed in PQSI and sleep diary before and after the intervention, from the study we can infer that Sirodhara with Trinapanchamool Ksheera kashayam with internal administration of Shankhapushpi Capsule with add on Sleep hygiene practises was found to be effective in treating Insomnia.

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