



“A Comparative Clinical Study On The Efficacy Takraadhara & Taila Dhara In Anirda W.S.R. To Insomnia”

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ABSTARCT:

Maintaining good quality of sleep would be crucial to health. This stress and strain of day to day life affects one's bodily organs through several psychophysical mechanisms. Among the several psychosomatic diseases, insomnia is the one which can be compared with *Anidra*. In *Ayurvedic* literature, these factors i.e. *Ahara* (diet), *Nidra* (sleep) and *Brahmacharya* (celibacy) have been compared with the three legs of sub-support and have been termed as the three *Upastambhas*. The ancient *Acharyas* have stated that happiness or sorrow, growth or wasting, strength or weakness, virility or impotence and the knowledge or ignorance as well as the existence of life or its cessation depend on the sleep. In the present study *Takra & Narayana Taila* were used for *Shirodhara*. These drugs not only reduce stress and tension but also enhances the circulation of brain, improves memory, nourishes the hair on scalp, calms the mind and body and helps to beat insomnia as well. Hence an effort was made to evaluate & compare the efficacy of *Takraadhara & Taila Dhara* in *Anirda* w.s.r. to Insomnia. A systematic study on 40 patients for 7 days duration *Takraadhara* in Group-A and *Narayana Taila Dhara* in Group B was carried out, On comparison between the two groups, the Group-B (*Narayana Taila Dhara*) showed better results than Group-A (*Takraadhara*.)

Key words: Takradhara, Taila Dhara, Anirda, Insomnia

INTRODUCTION

Ahara, *Nidra* and *Brahmacharya* (Abrahmacharya) are the three factors which play an important role in the maintenance of a living organism¹. In *Ayurvedic* literature, these factors i.e. *Ahara* (diet), *Nidra* (sleep) and *Brahmacharya* (celibacy) have been compared with the three legs of sub-support and have been termed as the three *Upastambhas*. The ancient *Acharyas* have stated that happiness or sorrow, growth or wasting, strength or weakness, virility or impotence and the knowledge or ignorance as well as the existence of life or its cessation depend on the sleep².

Insomnia is inability to sleep, in the absence of external impediments, such as noise, a bright light, etc., during the period when sleep should normally occur; may vary in degree from restlessness or disturbed slumber to a curtailment of the normal length of sleep or to absolute wakefulness³.

A general consensus has developed from population-based studies that approximately 30% of a variety of adult samples drawn from different countries report one or more of the symptoms of insomnia⁴.

In *Ayurveda*, *Shirodhara* is considered as one of the *snehana karma* widely practiced for treating *vatavyadhis*, *Nidranasha* etc.⁵ *Shirodhara* is the process in which medicated potion like *Taila*, *Kshira*, *Takra*, *Kwatha* is poured as a continuous stream on the forehead from a specified distance and then allowed to run over the scalp for a stipulated period of time.

Takradhara is a special *Panchakarma* therapy in which medicated buttermilk processed with medicinal herbs is used in the form of an external remedy⁶. It is used in the form of a thin stream i.e., Buttermilk is poured in a continuous stream over the forehead, in a specified manner. *Takradhara* is a traditional *Ayurvedic* procedure which is useful in treating psychosomatic disorders, psoriasis, hypertension and lack of sleep etc.

Hence in the present study *Takra & Narayana Taila* were used for *Shirodhara*,

AIMS & OBJECTIVES OF STUDY

- To carryout comprehensive literary work covering *Ayurvedic* classics and contemporary system of medicine on *Anidra & Insomnia*.
- To evaluate the effect of *Takradhara* and *Narayana Taila Dhara* in the management of *Anidra* (Insomnia).
- To compare the effect of *Takradhara* and *Narayana Taila Dhara* in the management of *Anidra* (Insomnia).

DRUG REVIEW

Table 1: Ingredients of Takradhara

Sl. No.	Drug Name	Latin name
1	<i>Amalaki (Churna)</i>	<i>Embllica officinalis</i>
2	<i>Cow Milk</i>	
3	<i>Musta (Churna)</i>	<i>Cyperus rotundus</i>
4	<i>Bala Taila / khseer Bala Taila</i>	
4	<i>Rasna (Churna)</i>	<i>Pluchea lanceolate</i>
5	<i>Takra</i>	

Table 2: Ingredients of Narayana Taila

Sl. No.	Drug Name	Latin name
1	<i>Bilva</i>	<i>Aegle marmelos</i>
2	<i>Agnimantha</i>	<i>Premna mucronate</i>
3	<i>Shyonaka</i>	<i>Oroxylum indicum</i>
4	<i>Patala</i>	<i>Stereospermum suaveolens</i>
5	<i>Paribhadra</i>	<i>Erythrina variegata</i>
6	<i>Prasarini</i>	<i>Paederia foetida</i>
7	<i>Ashwagandha</i>	<i>Withania somnifera</i>
8	<i>Brihati</i>	<i>Solanum indicum</i>
9	<i>Kantakari</i>	<i>Solanum surattense / or Solanum xanthocarpum</i>
10	<i>Bala</i>	<i>Sida cordifolia</i>
11	<i>Atibala</i>	<i>Abutilon indicum</i>
12	<i>Gokshura</i>	<i>Tribulus terrestris</i>
13	<i>Punarnava</i>	<i>Boerhavia diffusa</i>
14	<i>Shatapushpa</i>	<i>Anethum sowa / Funiculum vulgare</i>
15	<i>Devadaaru</i>	<i>Cedrus deodara</i>
16	<i>Jatamansi (Mansi)</i>	<i>Nordostachys jatamansi</i>
17	<i>Saireyaka</i>	<i>Barleria prionitis</i>
18	<i>Vacha</i>	<i>Acorus calamus</i>
19	<i>Raktachandana</i>	<i>Pterocarpus santalinus</i>
20	<i>Tagara</i>	<i>Valeriana wallichii</i>

21	<i>Kushtha</i>	Saussurea lappa
22	<i>Ela</i>	Elattaria cardamomum
23	<i>Shalaparni</i>	Desmodium gangeticum
24	<i>Prishniparni</i>	Uraria picta
25	<i>Mashaparni</i>	Teramnus labialis
26	<i>Mudgaparni</i>	Phaseolus trilobus / Vigna tilobata
27	<i>Rasna</i>	Pluchea lanceolata
28	<i>Turagagandha</i>	Withania somnifera
29	<i>Punarnava</i>	Boerhavia diffusa
30	<i>Shataavari</i>	Asparagus racemosus
31	<i>Saindhava Lavana</i>	Rock salt / Bay salt / Chloride of sodium.
32	<i>Godugdha</i>	Cowmilk
33	<i>Tila Taila</i>	Sesame oil

METHODOLOGY

SOURCE OF DATA

1. Clinical Sources

40 patients of *Anidra* were selected randomly from the OPD, IPD and by conducting the special camps in Department of Post Graduate Studies in Panchakarma, Bhagawan Mahaveer Jain Ayurvedic Medical College, Hospital & PG Centre Gajendragad.

- Literary:** All the available data on *Anidra* was collected from Ayurvedic and Modern textbooks, journals and websites.
- Drug source:** Raw materials were collected from local market after proper identification. Medicines required for the treatment were prepared in Rasashala of Rasashastra Department of Bhagawan Mahaveer Jain Ayurvedic Medical College pharmacy.

Study Design:

Open label comparative clinical study with pre and posttest design.

I. Inclusion Criteria

- Patients of both sexes, between the age group of 16-70 yrs.
- Patients fulfilling the diagnostic criteria of *anidra* (Insomnia) *Anidra* (Insomnia) patients with chronicity of 1 month to 5 years.

II. Exclusion Criteria

1. Psychiatric patients on treatment
2. Drug induced insomnia.
3. Patients who are already on treatment for insomnia.
4. Secondary insomnia.
5. Pregnant and lactating women.
6. Patients suffering from other systemic disorders.
7. Patients who are unfit for *Takradhara & Taila Dhara*.

INTERVENTION:

20 Patients of Group – A were administered with *Takradhara* for 7-14 days.

20 Patients of Group – B were administered with *Narayana Taila Dhara* for 7- 14 days.

Season/Time:

Usually, the treatment is done in the morning hours, between 7-10 am. If situation demands, it can be done between 4-6 pm. It is contraindicated in *Sisira* and *Hemantha ritu*.

Duration:

Takradhara/Tailadhara is done for a period of 7 days. The procedure is done for 45 to 60 minutes⁷

DIAGNOSTIC CRITERIA

According to ICD 10⁸ the criteria adopted were

- If the complaint is either difficulty in falling asleep or maintaining sleep or of poor quality of sleep.
- If the sleep disturbance has occurred at least three times per week for at least one month.
- If the unsatisfactory quality of sleep either causes marked distress or interferes with social and occupational functioning

ASSESSMENT CRITERIA:

Objective parameter:

Pittsburgh sleep quality index(PSQI)⁹

PSQI includes Subjective Sleep Quality, Sleep latency, Sleep duration, Sleep Efficiency, Sleep Disturbances, Use of Sleep Medications and Daytime Dysfunction.

Subjective parameter:

- Angamarda (body ache)
- Shirogaurava/Shirodaha/ Shirahshoola / Shiro Shunyata (head heaviness, ache)
- Jrimbha (yawning)
- Jadya (inactivity)
- Glani (mental fatigue regret)
- Bhrama (vertigo)
- Apakti (indigestion)
- Tandra (drowsiness)

The parameters were assessed before and after intervention

Table 3: Grading for Assessment of the Subjective parameter

The level of anidra (insomnia) will assessed with 0 to 3 gradations from mild to severe is mentioned below table

Sl. No.	Complaint	Scoring
1	Angamarda (body ache)	0 to 3
2	Shirogaurava/Shirodaha/ Shirahshoola / Shiro Shunyata (head heaviness, ache)	0 to 3
3	Jrimbha (yawning)	0 to 3
4	Jadya (inactivity)	0 to 3
5	Glani (mental fatigue regret)	0 to 3
6	Bhrama (vertigo)	0 to 3
7	Apakti (indigestion)	0 to 3
8	Tandra (drowsiness)	0 to 3

The level gradations

Not at all bothered	0
Slightly bothered	1
Moderately bothered	2
Severely bothered	3

RESULTS

Table 4: Effect of treatment on Chief complaints within groups.

Symptoms	Group	Mean Score			Relief %	Paired 't' Test			
		BT	AT	BT- AT		S.D.	S.E.	't'	P
Angamarda	A	1.65	0.55	1.10	67	0.55	0.12	8.9	<0.05
	B	1.80	0.50	1.30	72	0.65	0.14	8.8	<0.05
Shirogaurava	A	1.45	0.50	0.95	65	0.39	0.08	10.7	<0.05
	B	1.65	0.45	1.20	73	0.69	0.15	7.7	<0.05
Jrimbha	A	0.55	0.20	0.35	64	0.58	0.13	2.6	<0.05
	B	0.50	0.15	0.35	70	0.58	0.13	2.6	<0.05
Jadya	A	1.50	0.55	0.95	63	0.60	0.13	7.0	<0.05
	B	1.80	0.55	1.25	69	0.71	0.16	7.8	<0.05
Glani	A	1.45	0.50	0.95	65	0.51	0.11	8.3	<0.05
	B	1.60	0.40	1.20	75	0.61	0.13	8.7	<0.05
Bhrama	A	0.20	0.05	0.15	75	0.36	0.08	1.8	0.08
	B	0.40	0.10	0.30	75	0.57	0.12	2.3	<0.05
Apakti	A	1.30	0.50	0.80	61	0.61	0.13	5.8	<0.05
	B	1.75	0.55	1.20	68	0.83	0.18	6.4	<0.05
Tandra	A	1.55	0.60	0.95	61	0.51	0.11	8.3	<0.05
	B	1.45	0.50	1.00	69	0.97	0.21	4.5	<0.05

Table 5: Effect of treatment on Chief complaints between Groups.

Symptoms	Group	Mean Score	Unpaired 't' Test			
			S.D.	S.E.	't'	P
Angamarda	A	0.55	0.55	0.12	0.26	0.79
	B	0.50	0.65	0.14		
Shirogaurava	A	0.50	0.39	0.08	0.28	0.77
	B	0.45	0.69	0.15		
Jrimbha	A	0.20	0.58	0.13	0.27	0.78
	B	0.15	0.58	0.13		

Jadya	A	0.55	0.60	0.13	0.0	1.00
	B	0.55	0.71	0.16		
Glani	A	0.50	0.51	0.11	0.56	0.57
	B	0.40	0.61	0.13		
Bhrama	A	0.05	0.36	0.08	1.55	0.12
	B	0.10	0.57	0.12		
Apakti	A	0.50	0.61	0.13	0.21	0.82
	B	0.55	0.83	0.18		
Tandra	A	0.60	0.51	0.11	0.40	0.68
	B	0.50	0.97	0.21		

Table 6: Effect of treatment on PSQI within groups.

Symptoms	Group	Mean Score			Relief %	Paired 't' Test			
		BT	AT	BT-AT		S.D.	S.E.	't'	P
PSQI	A	16.0	8.55	7.45	46	2.78	0.62	11.9	<0.05
	B	16.9	8.00	8.30	49	4.36	0.97	8.5	<0.05

Table 7: Effect of treatment on PSQI between Groups.

Symptoms	Group	Mean Score	Unpaired 't' Test			
			S.D.	S.E.	't'	P
PSQI	A	8.55	2.78	0.62	0.47	0.63
	B	8.00	4.36	0.97		

DISCUSSION:

Vata and Manas are interdependent and if one becomes vitiated, it vitiates the other. Thus both seems to be vitiated in Anidra. Acharya Charaka has given importance to Vata in the management of Anidra. Hence, Manaha sukham, Mano anukula-vishaya etc. are mentioned in the management of Anidra. Recent advancement in the field of neurophysiology, neurochemistry, and psychiatry has provided much understanding about the mechanism of sleep and sleep disorders. During sleep many physiological changes occur in cardio respiratory functions, body temperature, muscle tone, hormone secretion and blood pressure. Sleep is one of the most important physiological functions that influence the daytime activity, vigilance, concentration and performance. Hence maintaining good quality sleep would be crucial to health. Insomnia is the major sleep complaint. Awakening frequently in night or late falling in sleep is the main symptom

reported by the individual suffering from insomnia. Insomnia is also significantly associated with anxiety and stress.

The probable mode of action of Shirodhara and its associated therapies like Narayana Taila and Takra Dhara can be outlined through their effects on the nervous system, mental state, and overall physiological balance, particularly via three main mechanisms:

1. Shirodhara: Purification and Relaxation Therapy

Shirodhara involves pouring medicinal oil or buttermilk over the forehead, targeting vital centers, reducing stress, and enhancing nervous system function. It's believed to operate in three stages: **Penetration**, **Stimulation**, and **Relaxation**.

- **Penetration**: The medicinal oil, which includes Sneha (oil-based ingredients), penetrates the skin, influencing centers such as the Agya Chakra and Sthapani marmas. Through the forehead, ingredients stimulate the SukshmaIndriyas (subtle sensory organs) within the brain, helping in mental relaxation and focus.
- **Stimulation**: Due to its lipid-soluble properties, the medicinal oil or drug components enter the central nervous system, affecting neurotransmitters like serotonin and catecholamines, balancing them to relieve insomnia and anxiety. Additionally, Shirodhara can stimulate the pineal gland, boosting melatonin production to induce sleep naturally. This results in improved functioning of the hypothalamus and autonomic nervous system, influencing relaxation, sleep, and stress reduction.
- **Relaxation**: Patients experience a deep sense of relaxation as Shirodhara lowers cortisol and adrenaline, aligns brain waves (alpha waves), and reduces sympathetic nervous system (SNS) activity. This phase enhances overall sensory function, supports sleep, and alleviates stress-related issues like anxiety, insomnia, and fatigue.

2. Narayana Taila: Herbal Oil Therapy

Narayana Taila, an herbal oil blend with 33 ingredients, primarily addresses Vata and Kapha doshas and offers multi-functional therapeutic properties:

- **Ingredients and Properties**: With Tikta (bitter), Madhura (sweet), Katu (pungent), and Kashaya (astringent) flavors, Narayana Taila has properties like **Dipana** (digestion-promoting), **Pachana** (digestion-improving), **Shothahara** (anti-inflammatory), **Vedana Hara** (pain-relieving), and **Ojovardhaka** (immunity-enhancing). These qualities make it suitable for treating disorders that arise from an imbalance of Vata dosha and Kapha dosha.

- **Mode of Action**: The oil's lipid-soluble ingredients allow it to penetrate through the skin and exert systemic effects on nerves, blood vessels, and even musculoskeletal issues.

CONCLUSION:

Insomnia, or *Anidra*, is especially common in the middle-aged population, typically between 20-40 years. Symptoms associated with *Anidra* include excessive yawning (*Jrimbha*), drowsiness (*Tandra*), body aches (*Angamarda*), heaviness in the head (*Shirogaurava*), indigestion (*Ajirna*), fatigue (*Jadya*), and exhaustion (*Glani*). Key causes are mental stress, worry (*Chinta*), fear (*Bhaya*), anger (*Krodha*), and irregular sleep routines.

Takradhara: A therapy using a mixture of *Amalaki*, *Musta*, *Rasna*, and *Ksheer Bala Taila*, effective for *Anidra* due to its Vata and Pitta calming properties. It reduces stress, improves brain circulation, enhances memory, nourishes the scalp, and promotes relaxation.

Shirodhara: This therapy also calms Vata and Pitta doshas, reduces stress, and nourishes the scalp. It supports brain circulation, helps alleviate insomnia, and provides mental and physical relaxation.

Narayana Taila Dhara: Research shows that *Narayana Taila Dhara* is highly effective in treating primary insomnia. Compared to *Takradhara*, *Narayana Taila Dhara* has shown superior results in improving sleep duration, quality, and related symptoms.

The study concluded that *Shirodhara*, specifically *Narayana Taila Dhara*, is a safe, effective, non-invasive, and cost-efficient therapy for managing insomnia and related conditions, including essential hypertension.

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