

## Role of Shirodhara with Sesame Oil in the Management of Anidra

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### ABSTRACT :

Nidra (sleep) in Ayurveda plays very important role in health point of view hence it is necessary to have a sound sleep. The disturbance in Nidra might be related to the faulty life style, mental tension, changed food habits and stress which ultimately disturb the Nidra. Charaka has described Nidra<sup>1</sup> among the primary tripod of life with its merits and demerits, classification and management. Shirodhara<sup>2</sup> is an important therapeutic measure in Ayurvedic system of medicine because of its simple administration and efficacy in variety of life style disorders. Shirodhara is a purifying and rejuvenating therapy designed to eliminate toxins and mental exhaustion as well as relieve stress and any ill effects on the central nervous system. Shirodhara is a unique form of ancient therapy of pouring oil on the forehead from a specific height and for a specific period continuously and rhythmically. Shirodhara shows highly significant reduction in symptoms of Jrimbha, Angamarda, Tandra, Ajirna, Malabaddhata etc. All patients were developed feeling of well being without having any side/toxic effect. Almost every person is indulging in Vatavardhak Ahara-vihara. In Anidra vitiated Vata Dosha is the main culprit. Oil therapy is best suitable for Vata Dosha Sesame oil has Vataghna property. So, Shirodhara with Sesame oil was selected for this work. Total 30 patients were randomly selected for this open study. Shirodhara was done for 45 minute on each participant for 14 consecutive days. Insomnia Severity Index (ISI) was used to evaluate the severity of insomnia as well as to determine the response to Shirodhara therapy. Data were collected at baseline, end of the treatment (day 14) and 4 week after the treatment ended (follow-up). Highly significant result was found in the study. Shirodhara with Sesame oil was

beneficial for moderate to severe insomnia. It only reduces 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. Shirodhara is an effective therapy in the management of insomnia. In this therapy no side effect was noticed such as letharginess which are common in modern treatment.

**Keywords :** Shirodhara, Sesame oil, Anidra, Insomnia

### I. INTRODUCTION:

According to a survey conducted in India found that due to stressful lifestyle, anxiety disorders, depressive illness, any psychiatric and pathological conditions 6.5% of females and 4.3% of males reported disturbed sleep<sup>3</sup> In support of this WHO (1998) said that disturbed sleep can lead to sleepiness at work, at school or when driving, tiredness, have concentration and vigilance detriments, irritability, frustration, memory blanks and higher tendency of accidents<sup>4,5</sup>

In ancient epics Nidra or Sleep is counted under the Traya Upastambha (three pillars). Acharya Charaka has mentioned its importance in detail along with Ahara (diet) and Brahmacharya (celibacy). Nidra has been described in "Traya Upastambha" (three sub tripods of body) by Maharishi Charaka. Equal importance has been given to sleep along with "Aahara" (diet) and "Brahmacharya" (celibacy)<sup>6</sup>. All these three measures should be indulged in judiciously to maintain good health. Henceforth, Sleep is one of the essential factors to lead a healthy life. Anidra is considered as an isolated disease in the context of Vata nanatmaja vyadhi and also as a symptom in various physical and psychological ailments, Loss of sleep or Vaikariki nidra occurs in patients whose kapha

is diminishes, vata is increased or who suffer from physical or mental ailments, Acharya Sushruta says that Anidra occurs due to vitiations of vata and pitta, psychological ailments, extreme weakness or ill health and physical trauma. Acharya Charak discusses that anidra (insomnia) may be due to excess purgation, emesis or blood letting, increased physical exertion, overworking, debility because of old age or diseases, excess fasting and uncomfortable bed. Acharya Vridhha Vagbhatta has described clinical features of Anidra. It leads to yawning, bodyache, lethargy, headache, and giddiness, pain in eyes, apathy, fatigue, and indigestion and vata diseases. It may be a symptom of stressful lifestyle, depressive illness, anxiety disorders, any psychiatric conditions or any other pathological conditions.

The response to the psychological conditions varies person to person because each individual has different psychic and bodily constitution. However, these stressors play certain role in the development, progression, prognosis as well as management of the disease. Human life is considered as the invaluable opportunity to achieve the prime goals of life viz. Dharma, Artha, Kama and Moksa<sup>7</sup>. To achieve all these things, one needs a healthy and calm life. Aahara, Nidra and Bramhacharya are described to be the Trayopasthambas<sup>1</sup> (Three supportive pillars). Hence, Sleep is one of the essential factors to lead a healthy life. It has been rightly stated by Acharya Charaka that happiness & misery, proper & improper growth, good strength & weakness, potency & sterility, knowledge & ignorance and life & death of an individual depend on proper and improper sleep<sup>8</sup>. It means Anidra is directly affecting our physical and mental health. Anidra may be a symptom of stressful life style, depressive illness, anxiety disorders, any psychiatric conditions or any other pathological conditions. Whatever may be the cause of Anidra it needs immediate attention in present day lifestyle. It is affecting nearly 1/3rd of population (especially youth) in western developed countries and the incidences are increasing day by day in the developing countries. If Anidra is left untreated, it may reduce mental capacity of an individual, reduce efficacy, increase the chances of various types of accident and ultimately it may drag the individual towards several severe psychosomatic disorders. Shirodhara is a classical ayurvedic panchkarma procedure of slowly dripping medicated oil on the center of the forehead of the subject, resting quietly on a comfortable bed. The

Shirodhara is meaning, shira - head and dhara - a steady flow. This procedure initiates mental relaxing induces a relaxed state of awareness.<sup>9</sup>

**Aims:**

- 1-To study and evaluate the efficacy of Sesame oil Shirodhara in Anidra.
- 2-To evaluate the efficacy of Sesame oil in Anidra. An effort is made to evaluate the efficacy of the administration of Shirodhara in a series of patients suffering from Anidra.

**Objectives:**

1. Conceptual and clinical studies on Anidra and its management with time tested Ayurvedic principles.
2. To evaluate Nidrakara effect of the Shirodhara in a series of patients suffering from Anidra on various scientific parameters.
3. Efficacy of Nidrakara effects of the Shirodhara.

**Material and Method:**

Selection of Cases : 30 clinically diagnosed patients of Anidra were randomly selected. Patients who were fulfilling the criteria for diagnosis and inclusion were selected from O.P.D. / I.P.D. unit of P.G.Department of Panchakarma, V.Y.D.S.A.M., Khurja, Bulandshahr 203131.

**Inclusion Criteria:**

1. Patients of both sexes between the age group of 16 to 60 years of both sexes having Anidra of minimum one month duration were selected randomly for the study.
2. Patients of Anidra with mild hypertension, mild depression and anxiety disorders without any complications of any other diseases were also consider for the study.

**Exclusion Criteria:**

1. Patients below 16 years and above 60 years of age.
2. Patients who were suffering from major psychiatric illness, chronic disease and acute condition depressive psychosis, epilepsy were excluded from the study.
3. Alcoholic, drug users and drug that could cause sedation were also excluded from the study the study.
4. Patients having chronic illness like asthma, malignancies, liver cirrhosis, chronic renal failure, diabetes etc. were excluded.

5. Patients with acute illness like Cardio Vascular Accident, Congestive Cardiac Failure, Myocardial Infarction, Chronic Obstructive Pulmonary Disorders, meningitis, Orthostatic hypotension, liver disease, thyroid disease, pregnancy, Cardio Vascular Accident, and acute pain conditions and similar other disorders were excluded.

**Pre Treatment Observations:** All the patients have been studied along with the registration by noting down their demographic profile including their age, sex, address, occupation, education, socio-economic status, marital status, life style, addictions, dietary habits etc. After preliminary registration, patients were subjected to detailed case history taking, physical, general and systemic examinations. In history and examination importance was given to mental status examination. During this all other relevant informations like Ashtavidha Pariksha and Dashvidha pariksha including assessment of Sharirika Prakriti and Manasika Prakriti (based on the features described in classical texts) etc. were noted.

**Administration of Drug & Treatment**

**Schedule:** Total 30 registered, clinically diagnosed and confirmed patients of Anidra were selected for the present clinical trial.

**Shirodhara Drug:** Sesame Oil

**Dose:** 2 litre, Duration: 45 min. /per day in the morning (14 Days for Shirodhara)

**Follow up:** 4 week after completion of trial.

**Assessment criteria:** For assessment criteria Insomnia Severity Index was used. This Insomnia

Severity Index is a 7 item question scoring pattern.

Sum of these scoring patterns is interpreted as

0–7 No clinically significant insomnia

8–14 Sub threshold insomnia

15–21 Clinical insomnia (moderate severity)

22–28 Clinical insomnia (severe)

Other symptoms associated with insomnia which is described in Ayurveda such as Shirshool, Tandra, Alasya, Glani, Angamarda, Jrimbha were interpreted as-

Severe – 3

Moderate-2

Mild-1

Normal-0

**Statistical analysis:** Statistically in terms of mean score (X), Standard deviation (S.D.), Standard Error (S.E.). Paired t test was carried out at the level of 0.1, 0.05, 0.01, and 0.001 of P levels. The results

were interpreted as – P>0.05 as Non significant (N.S.), P< 0.05 Significant (S.), P<0.01 Significant, and P< 0.001 Highly Significant (H.S.)

**II. OBSERVATION AND RESULT:**

Among the total 30 patients registered for the trial, 3 patients could not pursue the trial for its complete duration for various reasons, so they were dropped out. Remaining 27 patients completed the trial

and were analyzed statistically and results obtained are described below. Observations and results in Insomnia Severity Index among 27 patients

:Following Table shows the result of Sesame oil shirodhara in Insomnia.

**Insomnia Severity Index among 27 patients:**

Insomnia severity index score	N	Mean score	Mean Difference	% Relief	S. D.	S. E	P	
Insomnia severity index score	27	1.48	0.81	0.66	44.66	0.4840	0.0924	<0.0001
Shirahshool	27	1.63	0.48	1.14	69.93	0.7131	0.1381	<0.0001
Tandra	27	1.11	0.59	0.51	45.94	0.6427	0.1237	<0.0001
Glani	27	1.14	0.59	0.55	48.24	0.6405	0.1233	<0.0001
Alasya	27	1.63	0.48	1.14	69.93	0.7141	0.1072	<0.0001

Jrimbha	27	1.48	0.81	0.66	44.59	0.4804	0.0924	<0.0001
Angamarda	27	2.18	0.92	1.25	57.33	0.7642	0.1471	<0.0001

On observing, the result was found as highly significant in insomnia severity index score. It was found that before treatment 19 patients were having severe insomnia, 8 patients were having moderate severity, no patient had mild severity. It was found that after treatment no patient had severe symptoms, only 2 patients had moderate severity, 9 patients had mild severity. 15 patients had got complete relief from insomnia. Improvement before & after treatment was statistically highly significant in symptoms like Shirshool, Tandra, Galani, Alasya, Jrimbha, Angamarda.

### III. DISCUSSION:

Shirodhara therapy is extensively used for alleviation of psychic and psycho-somatic ailments. The drugs under Sesame oil are having (Rasa – Madhura, Tikta, Anurasa – kashaya Guna – Sukshma, Ushna, Vyavayi. Teekshna, Vishada, Guru, Sara, Vikasi, Lekhana, Vipaka – Madhura, Veerya – Ushna, Effect on Tridosha – Balances Vata and Kapha Dosh, Slightly increases Pitta Dosh, Balakar, Deepana, Shrothovishodhan, Tvachya, Vrushya, Vayasthapana, Medhakara Smrithikara)<sup>10,11,12,13,14,15,16</sup>. Sesame Oil is effective for insomnia but does not act as a sedative. Thus it helps the body to address a stress related condition rather than masking it with sedatives. The therapeutic effect may be due to diffusion of Oil drugs through the fine pores present over forehead in similar way as seen by the procedure like Abhyanga, Snana, Udvartana, Parisheka etc. Moreover, possibility is there to produce a certain amount of absorption by application of substances on the skin. Shirodhara procedure stimulate the Agyachakra - seat of vital part (Marma) and thus help in regulating the neuro-endocrine system to maintain the hormones, Neurotransmitters etc. related to Hypothalamus, Pituitary, Pineal gland etc, to have proper relaxation & tranquility. Moreover, supine position in Shirodhara also helps in providing further relaxation. Whether Shirodhara directly influence the release of Melatonin – a hormone responsible to induce Sleep, could be a subject of further study. The neurophysiologic mechanism of the effect of Shirodhara on the psycho-physiological changes may be related to the tactile stimulation of skin or

hair follicle innervated by the first branch of the trigeminal nerves (Ophthalmic nerve).

**Conclusion:** In overall assessment it has been found that Shirodhara with Sesame oil therapy have beneficial role for the management of Insomnia.

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