

ROLE OF HERBAL OIL IN STRESS INDUCED INSOMNIA (ANIDRA) AND ITS MANAGEMENT - A CASE STUDY.

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ABSTRACT

Background: In recent times the use of Herbal product has increased tremendously in the world as well as in developed & developing country. *Ayurveda* advocates some fruitful Panchakarma therapies like *Nasya*, *Shiroabhyanga* and *Murdhni Chikitsa* for *Mana* and *IndriyaVikaras*. *Shiroabhyanga* is a classical and a well-established ayurvedic procedure. It is a type of *Murdha tail*. '*Shiroabhyangam*' is the original name for the Indian head massage. Man is working hard for day and night, besides that mental stress, addiction of alcohol; junk food, surfing internet, chewing tobacco leads to insufficient sleep. *Ayurveda* having a light of hope for this condition by correction of basic pathology particularly through *Panchakarma*, like external treatment in the form of *Shiroabhyanga* to treat *Insomnia*. It reduces *shirshula*, heaviness in head, pain in neck, shoulder pain, back pain, burning of eyes. Considering all the above benefits of *shiroabhyanga*; we undertook the study of effect of herbal oil on stress induced Insomnia. **Objectives:** Evaluate the efficacy of Herbal Oil *Shiroabhyanga* in Stress induced Insomnia (*Anidra*). **Methods:** Single case study. The study was conducted in the Department of Panchakarma, MGACH&RC, Salod, Wardha. **Results:** The patient got Positive response by increasing duration of sleep and quality of sleep along with over well-begin in term of quality of life. **Conclusion:** It is concluded that *shiroabhyanga* has highly significant effect on Stress induced Insomnia (*Anidra*).

Keywords: *YShiroabhyanga*, *Nidranasha*, Stress, Herbal Oil.

1. INTRODUCTION

Adequate sleep (*Nidra*) is one of the essential factors to lead a healthy life. *Ayurveda* mentioned three important facts to keep a person in healthy status as *Aahara* (diet), *Nidra* (Sleep) & *Bramhacharya* (Celibacy) are mentioned as three *Upastambha* (sub-supporting pillars) executing an important role in maintaining the health¹ Acharya Charaka included *Anidra* in 80 *nanatmajavyadhi* of *Vataroga*.² About 30% of the general population has complained of insomnia.³ Acharya Sushruta explained it under *Garbha Vyakarana Sharira*.⁴ *Vaikariki Nidra* can be correlated to sleep disorders. Vagbhata mentioned it in *Trayopastambha* but used the term *Asvapna* in *Vataja*

Nanatmaja Vikara.⁵ Sharangadhara discussed *Anidra* in *Vataja Nanatmaja Vikara*, *Alpanidra* in *Pittaja Nanatmaja Vikara* and *Atinidra* in *Kaphaja Nanatmaja Vikara*.⁶ Thus, all Acharyas considered importance of *Nidra* and *Nidranasha*.

By getting a good & sufficient sleep one can get ready for new work. A sound sleep in the night regenerates the power of the mind and body to accept new challenges, maintains health, proficiency and emotional well-being.⁷ Human is working hard for day and night, besides that mental stress, addiction of alcohol; junk food, surfing internet, chewing tobacco leads to insufficient sleep exhaustion. This lack of sleep, or restless sleep, then interferes with

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our daily activities both physically and mentally constitution and some *Dosha* like *Vata* & *Pitta*. These factors directly effect on the sleep and causes loss of sleep (*Nidranasha*). According to modern scientific view, loss of sleep has many reasons as like illness, stress, elder age, pain, mental illness etc.

Ayurveda advocates some fruitful *Panchakarma* therapies like *Nasya*, *Shirodhara*, *shiroabhyanga* and *Murdhni Chikitsa* for *Mana* and *Indriya Vikaras*.⁸ Head is one among three *marma* of the body it has control on different body function⁹ In *CharakSamhita* it is mentioned that *Abhyangas* are helpful to promote *Nidra*. Daily *shirobhyanga* helps to promote good sleep and reduces stress.^{10,11} During application of oil on the *shirpradesha*, it will be applied on *shir Pradesha*. This is called *Murdhni Chikitsa*. Thus, *Murdhinichikitsa* is a procedure of conducting treatments on the head using *herbal* (medicated) oils such that the oil remains in contact with the scalp for a duration of time. This contact period of oil on the scalp is necessary for begetting its benefits. *Murdhni Taila* is also practiced as a part of *Dinacharya* (daily regimen). *Acharya Vagbhata* classified *MurdhniTaila* in four types like *Shiroabhyanga*, *Shiropichu*, *Shirodhara* and *Shirobasti*.¹² Since head massage can be done on a daily basis, it is predominantly a treatment advised for prevention of many psychosomatic disorders. Prevention of diseases pertaining to body, mind and sense organs is the first indication of *Shiro- Abhyanga* It is also indicated for person suffering from Headache (*Shirshool*), Baldness of hair (*Khalitya*), Premature Graying (*Palithya*), Hair fall (*kasha patana*) it helps hairs to get deep rooted, long, dense, look beautiful and black in colour.¹³ In recent times the use of *Herbal* product has increased tremendously in the world as well as in developed & developing country. Massage with herbal oil on the head relaxes the mind there by reduces the stress. The head massage induces a state of calm, peace and tranquillity and promotes high levels of alertness and concentration.¹⁴

Due to stressful life incidence of *Anidra* is increasing day by day. It affects normal activities and also leads to various disorders. In Modern

medicine sedative and tranquilizer drugs are used to induce sleep in insomnia, but it cannot be used for a long time as it leads to dependence¹⁵. Hence there is need for the efficient management of insomnia in a natural way. *Anidra* is caused due to vitiation of *Vata*. *Abhyanga* is the best treatment for alleviation of *vata*, which is the main causative factors of *Anidra*. With this background, above topic is selected for study. The benefits of the massage may be enhanced by the choice of the massage oil. *Herbal Oil* has sedative, anxiolytic, *tridoshaghna*, memory and learning enhancer, and anti-epileptic properties. Massage of the *shira pradesha* with luke warm *Herbal Oil* gives relaxation to mind, reduce stress and induces sleep.¹⁶

2. MATERIALS AND METHODS

2.1. Aim

Role of *Herbal Oil Shiroabhyanga* in Stress induced Insomnia (*Anidra*).

2.2. Objectives

To evaluate effects of *Herbal Oil Shiroabhyanga* in Stress induced Insomnia (*Anidra*).

2.3. Case Study

Demographic details:

Name of the patient - XYZ; **Age** - 42; **Sex** – Female; **Address** – Deoli, Dist. Wardha; **Occupation** – Teacher.

Chief Complaints

- ◆ Difficulty in falling asleep and staying asleep since 1 year
- ◆ Fatigue - since 1 year
- ◆ Unable to concentrate - since 1 year

Associated complaints:

- ◆ Numbness and heaviness in head - since 1 year
- ◆ Constipation (On and off) - since 1 year

History of present illness:

A female patient aged 42 years presented with the complaints of difficulty in falling asleep and staying asleep, fatigue and unable to concentrate in her work since from 1 years she regularly goes to bed at 10 pm but is unable to sleep until 1 am she experience about 3-5 awakenings

every night and with each awakening requires about 30 minutes to fall asleep again. Simultaneously she was suffering from Numbness and heaviness in head. Also, she had given the history regarding the constipation. Due to mental stress, patient complains of falling asleep and restlessness in the night, therefore she took Sedatives regularly from last 10 months, in spite of that patient was not getting proper sleep. Hence the patient was approached to Panchakarma OPD. She was advised the *Shiro-abhyanga* and *shaman chikitsa* immediately and suggested her to stop previous medicines.

Investigations done

The patient was visited to the OPD; she was advice for all routine blood investigations to rule out any possible associated disorder; like CBC (Complete Blood Count), ESR, Blood Sugar Level, Routine and Microscopic Urine Examination. Reports of above-mentioned investigations were within the normal limits.

Past History: There were no any medical and surgical illness

Personal History: Occupation: Teacher; **Food Habits:** Non vegetarian food, irregular diet; **Addiction:** There was no significant past history of any type of addiction.

General Examinations:

Nadi (pulse) = 74/min; **Mala (stool)** = *Vibandha*; **Mutra (urine)** = *Samyak*; **Jeevha (tounge)** = *Saam*; **Shabda (speech)** = *Spashta*; **Sparsha** = *Anushna sheet*; **Druka (eyes)** = No pallor, no icterus; **Akruti** = *Madhyama*.

Vitals Examination: B.P. = 110/70 mm/Hg; **Pulse** = 74/min; **RR** = 20/min; **Temp** = 97°F.

Treatment Given:

Shiroabhyanga is a type of *Murdhnitaila*, in this *taila* was applied to head with different technique of head massage. It is very useful in insomnia, stress, anxiety, other neurological, psychological and psychosomatic disorders. The procedure was done with *Herbal oil* for 15 minutes for the duration of 15 days (Table No 1).

The treatment is carried out in two phases

- ◆ First Phase – *Shiroabhyanga* with *Herbal*

oil given for 15 days.

- ◆ Second phase – After 15 days, *Shaman aushadhi* was advised for 15 days.

2.4. Herbal oil preparation:

Ingredients: Shown in Table No 2.

Properties of Drug: Shown in Table No 3.

Oil preparation:

- ◆ *Bramhi, Jatamansi, and Triphalakalka* and *kwath* added to *murchitatilataila*
- ◆ Composition is allowed to boil on the medium fire till the water gets evaporated
- ◆ The oil residue is filtered and preserved for the usage.²⁴

2.5. Assessment Criteria:

Shown in Table No 4.

2.6. Shiroabhyanga Procedure²¹

Patient was asked sit on knee heighted chair. Lukewarm Herbal Oil (approximately 38°C) was applied on the head and neck by hands. After smearing the oil following steps were used for massage.

- ◆ **Oiling and Smearing-** Apply oil gently all over the head.
- ◆ **Combing and Spreading-** fingers were kept loosely like comb and dragged the fingers from front to backside of the head and spread the oil evenly and for the nourishment the hair, this procedure was done at list 2-3 min regularly.
- ◆ **Finger Strokes (*Angulikreeda*)** – commonly called *Champi* using double knocking technique with fingers. For 2-3 min.
- ◆ **Petrissage (*Nishpeeda*)** - Scalp was hold between thumb and fingers of both hands from both sided to squeeze the scalp skin. These squeezing and releasing strokes are used for increasing the blood circulation and lymphatic drainage in the scalp. the procedure was carried out for 2-3 min.
- ◆ **Vibration (*Kampana hasta*)** - Rubbed the hand gently on the scalp which is generating the heat and vibrates the head and neck
- ◆ **Hair tugging- (*Kesha Luchana*)** - It is very common practice at the end of head massage. In this step, hair bunches are taken in between loose fingers and pulled out.

These make the loose hair removal and strengthen the hair root and facilitate the new hair growth.

- ◆ **Compression (*Ghatitha hasta*)** - last step of *shiroabhyanga* is compression of head in between two hands in opposite direction. It done side by side and front to back. Compressing the head empty the blood vessels of scalp and rapidly fills back. This step is done for 2-3 min to facilitate the circulation.

3. RESULTS

Effect of therapies on insomnia:

After completion of total therapy (*Shiroabhyanga* with *shamanaushadhis*), the patient was significantly improved. Patient was feeling fresh and relaxed mind. She improves the quality of sound sleep. Patient was enjoying her day to day life. Results are shown in Table No 5.

4. DISCUSSION

Shiroabhyanga is a procedure which comes under the external oleation therapy used for neuromuscular relaxation and nourishment. *Shiroabhyanga* is a relaxation therapy which relieves mental exhaustion as well as pacifies the aggravated *Vata Dosha* in head. It helps to normalize the function of central nervous system by relaxing the nervous system and balancing the circulation of blood in the head. According to modern medical science stress or anxiety is main cause for Insomnia, and in the condition of *Anidra* (insomnia) the main vitiated *Dosha* is *Vata*, so balance of *Vata Dosha* is an important thing to treat insomnia. By the application of oil over the head, the dryness of skin subsides and in turn *Kapha Dosha* increases. These increases *Kapha Dosha* enhance the *Tama*, which counteracts the *Raja Dosha*. Ultimately this process nourishes the essential components of body and helps to get rid of the problem like insomnia.

Shiroabhyanga is one of the fruitful treatments for reducing stress & anxiety and *Shiroabhyanga* with *Herbal Oil* is very beneficial due to procedural effect as well as due to drug effect also. As Herbal oil Head massage with proper steps increases local circulation

may help the absorption of active principles. Main contents of *Herbal Oil* having cooling property which regulates Hypothalamo-Pituitary axis, which may help to reduce stress and enhancing secretion of serotonin and improves sleep. In *Anidra*: Signs and symptoms got reduced may be due to combined action of *shodhan* and *shaman* therapy. The probable mode of action of this therapy can be postulated in Table No 6.

Shamana Aushadhi:

- ◆ ***Bramhi Vati***: *Bramhivati* is most widely used in depression, psychiatric condition and sleeplessness etc. It balances the *Vata* and *pitta* and in *nidranash* there is imbalance of *vata-pitta dosha*. So, it is useful in *Stress induced insomnia*.²⁵
- ◆ ***Saraswatarishtam***: It is good memory tonic. It is used in condition of *chinta*, *nidranash*, *bhaya*, intellectual, it balances the *vata* and *pitta* dosha. It is good *herbal* combination which corrects the function of stomach and intestine also. So it is indicated in *nidranash*.²⁶

5. CONCLUSION

In this case study, we found significant changes were observed in the different parameters. From this study, it is stated that *Ayurveda* can be a promising alternative in stress induced insomnia (*Anidra*). Further, clinical trials are needed to establish a standard management of sleep disorders. From the above study it can be concluded that the *Shiroabhyanga* external therapy with Herbal Oil is very useful in the treatment of Stress induced insomnia (*Anidra*) the duration of sleep and quality of sleep improved and relief in heaviness and numbness head and fatigue etc Symptoms. Patient had stopped Sedatives drugs and it can prove a safe remedy without any side effects. **Recommendation** - To understand the effectiveness of therapy in a better way it should be carried out for longer duration on a greater number of patients.

6. REFERENCES

1. Vd Yadavaji Trikamji Acharya, Editor. (Reprint ed.). Charaka Samhita of Charaka. Varanasi: Chaukhambha Surabharati Publications, 2008; p. 74, 113, 118, 119.

2. Gangasahaya Pande, Editor (Reprint ed.). Vidhyotini Hindi Tika on Charaka Samhita of Charaka, Sutrasthana, Chapter 11, Verse 35. Varanasi: Chaukhamba Bharati Academy, Sutrasthana. 2001; p. 227.
3. Roth T. Insomnia: Definition, prevalence, etiology, and consequences. J Clin Sleep Med. 2007;3 (5 Suppl): S7-10.
4. **Ibidem 2**, Sutrasthana, Chapter 20, Verse 11.
5. Ambika Datta Shastri, Editor. (12th ed.). Ayurved Tattva Sandipika Hindi Commentary on Susruta Samhita of Sushruta. Sharirasthana; Chapter 4, Verse 41. Varanasi: Chaukhamba Sanskrit Sansthan, 2001.
6. R.D. Tripathi, Editor (2nd ed.). Saroj Hindi commentary on Ashtanga Sangraha of Vagbhata, Sutrasthana; Viruddhannavigyaniya Adhyaya, Chapter 9. Varanasi: Chaukhamba Sanskrit Sansthan, 1992.
7. Lawrence E, Steven M. The Harvard Medical School Guide to a Good Night's sleep. McGraw-Hill eBooks, 2007, 30.
8. Indriya Vikara. Available from www.jahm.in. Last accessed on 26/6/2018.
9. **Ibidem 2**, Siddhisthana, Chapter 9, Verse 5. p. 738.
10. Dr. J. L. N. Shastry. Dravyaguna Vigyana Vol II (English). 1st ed. Varanasi: Chaukhamba Orientalia. 2004, p. 29127.
11. Vd Yadavaji Trikamji Acharya, Editor. (8th ed.). Sushruta Samhita of Sushruta. Varanasi: Chaukhamba Orientalia, 2007; p. 358-59.
12. Pt Hari Sadashiva Shastri, Editor (Reprint ed.). Ashtanga Hridaya of Vagbhata. Varanasi: Chaukhamba Surbharati Prakashana, Varanasi, 2010; p. 140-143.
13. Tripathi Brahmanand, Editor (Reprint ed.). Charaka Samhita of Charaka (Vol I), Sutrasthana, Chapter 5, Verse 81-83. Delhi: Chaukhamba Sanskrit Sansthana, Sutrasthana. 2005; p. 42.
14. Head Massage. Available from, www.easyayurveda.com/2016/05/09/ayurvedic-head-massage-shiro-abhyanga/. Last accessed on 25/06/2018.
15. Tripathi K. D. Essentials of Medical Pharmacology. 6th ed. New Delhi: Jaypee publications. p. 392.5.23.
16. Brahmi Oil. Available from <http://oilhealthbenefits.com/brhami-oil/>. Last accessed on 21/06/2018.
17. A. P. Deshpande, Subhash Ranade. Text book of Dravyaguna Vigyan Vol II (English). Pune: Proficient Publishing House, 2007; p.522-524.
18. **Ibidem 17**, p. 455-458.
19. **Ibidem 17**, p. 183-184.
20. **Ibidem 17**, p. 842.
21. B. A. Lohith. Text Book of Panchakarma. Varanasi: Chaukhamba Orientalia, p. 67.
22. **Ibidem 17**, p. 522-524.
23. **Ibidem 17**, p. 455-458.
24. **Ibidem 17**, p. 509.
25. Ayurved Sara Sangraha, Text Book of Rasa Shastra. p. 446.
26. Ayurved Sara Sangraha, Text Book of Rasa Shastra. p. 642.

7. TABLES

Types	Drugs	Dose	Time	Duration	Anupana
Panchakarma treatment	<i>Shirobhyanga</i> with Herbal Oil	-	Morning hours	15 minutes daily for 15 Days	-
Palliative treatment	<i>BramhiVati</i>	250 mg 2tab BD	after food	for 15 Days	Luke warm water
	<i>Saraswa-tarishhta</i>	15 ml BD	after food	for 15 Days	Luke warm water

Table No 1 Treatment details

Sr. No.	Contents	Quantity
1.	<i>Bramhi</i>	1 part
2.	<i>Jatamansi</i>	1part
3.	<i>Triphala</i>	1part
4.	<i>Tila tail</i>	4 part

Table No 2 Contents of Herbal oil

Sr. No.	Drugs	Rasa	Guna	Virya	Vipaka	Karma	Prabhav
1	<i>Bramhi</i> ¹⁷	<i>Tikta, kashay, madhur</i>	<i>Laghu. Sara</i>	<i>Sheet</i>	<i>Madhur</i>	<i>Rasayan Tridoshaghna Stimulate buddhi by removing mental weakness</i>	<i>Unmad and apasmara-nashaka</i>
2	<i>Jatamansi</i> ¹⁸	<i>Tikta, kashay, madhur</i>	<i>Laghu, snigdha</i>	<i>Sheet</i>	<i>Madhur</i>	<i>Rasayan, Medhya Manasdosahar Keshya</i>	<i>Ma-nasadosha hara</i>
3.	<i>Triphala</i> ¹⁹	<i>Kashaya, tikta, ka-tu, amla, madhur.</i>	<i>Laghu, ruksha, sara</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Tridoshashamak</i>	<i>Medya, chakshush ya</i>
4.	<i>Tilataila</i> ²⁰	<i>Madhur, kashay, tikta</i>	<i>Guru, Snigdha</i>	<i>Ushna</i>	<i>Madhur</i>	<i>Vatashamak, kaphapittakara</i>	

Table No 3 Properties of Herbal Oil

S.N.	Parameter	Description	Grade
1	Total hours of Sleep	Normal Good Sleep (More than 6-8 hrs.)	0
		Moderate Sleep (4-6 hrs.)	1
		Mild Sleep (2-4 hrs.)	2
		No sleep (0-2 hrs.)	3
2	Difficulty in initiating sleep	Normal Sleep within 30 min.	0
		More than 30 mins -1 hrs.	1
		More than 1 hr-2 hrs.	2
		More than 2 hrs. -3 hrs.	3
3	No. of awakenings	No awakening, normal	0
		1 - 2 times	1
		2 - 4 times	2
		more than 4 times	3

4	Jrimbha (Yawning)	No <i>Jrimbha</i>	0
		Occasionally in a day (0-5 times)	1
		Regularly (more than 5 times)	2
5	Shirogaurava	Absent	0
		Occasional once in 24 hrs.	1
		Intermittent	2
		Frequently	3
6	Angamarda (Body ache)	No body ache	0
		(Mild) Generalized pain on & off during the day	1
		(Moderate) Generalized pain throughout the day but is able to normal activity	2
		(Severe) Generalized pain throughout the day enough to affect routine work.	3
7	Malbaddhata (Constipation)	No	0
		Yes	1

Table No 4 Assessment Criteria

Sr. No.	Symptoms	Day / Treatment		
		D0 (Baseline)	D0 <i>Shiro abhyanga</i>	D15 <i>Shaman aushadhi</i>
1.	Total hours of sleep	4	2	1
2.	Difficulty in initiating sleep	3	2	1
3.	No. of awakenings-	3	2	1
4.	<i>Jrimbha</i> (Yawning)	2	0	0
5.	<i>Shirogaurava</i>	3	1	0
6.	<i>Angamarda</i> (Body ache)	3	1	0
7.	<i>Malbaddhata</i> (Constipation)	Yes	No	No

Table No 5 Results

S. N.	Content	Efficacy
1.	<i>Bramhi</i> ²²	<ul style="list-style-type: none"> ◆ <i>Tikta, katu, and Madhur rasatmak, laghu, sara gunatmak</i> ◆ <i>It has Sheeta virya, Madhur vipaka</i> ◆ <i>Tridosha shamak properties.</i> ◆ <i>It stimulates buddhi by removing depression</i> ◆ <i>It should be used as pitta shamak and to nourishes majja dhatu in loss of memory and confusion caused by stress.</i> ◆ <i>It is not nidra janan but restores normal function of mind by eliminating mental turbulence and debility.</i>

2.	<i>Jatamansi</i> ²³	<ul style="list-style-type: none">◆ <i>Pittaghna</i> due to its <i>tikta</i>, <i>kashay</i>, and <i>madhur rasa</i>; <i>sheet virya</i>.◆ <i>Kaphaghna</i> being <i>kashay</i>, <i>tikta</i> and <i>Vataghna</i> being <i>Madhur vipaki</i>.◆ It is useful in <i>nidra janan</i> and <i>vedna shamak</i> by pacifying <i>vatadosha</i> by nourishing <i>dhatu</i>.
3.	<i>Triphala</i> ²⁴	<ul style="list-style-type: none">◆ <i>Tridosha shamak properties</i>.
4.	<i>Tila tail</i>	<ul style="list-style-type: none">◆ <i>Tila taila vata shamak</i> by its <i>guna</i>.◆ It gives intelligence, strength, nutrition and has antioxidant properties.

Table No 6 Mode of action of Herbal Oil

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