

Volume 7, Issue 7, 1179-1184

**Review Article** 

SJIF Impact Factor 7.421

ISSN 2278 - 4357

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# EFFICACY OF ASHWAGANDHADI TAILA NASYA IN ANIDRA (STRESS INDUCED INSOMNIA): AN ANALYTICAL REVIEW

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Article Received on 20 May 2018,

Revised on 10 June 2018, Accepted on 01 July 2018, DOI: 10.20959/wjpps20187-11313

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### ABSTRACT

*Nidra* is among the three important tripods of life (*ahara, nidra brahmacharya*) as per ayurvedic acharyas.<sup>[1]</sup> Complete loss of *nidra* is known as *nidranaash or* anidra.<sup>[2,3,4]</sup> It is caused by *vata vaigunya*. In today's competitive era, stress is present at every stage of life. Stress, along with creating negative impact on the general health of a person, is found one of the leading cause of insomnia worldwide. Insomnia not only have psychiatric and physical ill effects on the human body but also deteriorates family and social life of the person on the whole. Pharmacological management of insomnia which includes the use of benzodiazepines, non-benzodiazepines, melatonin, anti-depressant and antihistamine medications has only limited effect on the disease. They

rather produce many harmful side effects like dependence, abuse etc. For this reason, patients are gaining more interest towards the use of Non-pharmacological treatment like cognitive behaviour therapy and other relaxation therapies *Ashwagandha*, an excellent rejuvenator, by virtue of its anti-stress property brings about dramatic results in patients with stress induced insomnia. *Ashwagandha* oil when administered through nose in the form of *nasya*, stimulate the higher centres of brain thereby affecting the endocrine and nervous system functions, thus alleviating the aggravated *doshas*. This breaks down the whole *samprapti* of *nidranasha*.

KEYWORDS: tripod, vaigunya, nasya, ashwagandha, rejuvenator, samprapti.

#### **INTRODUCTION**

Insomnia is a common sleep disorder that affects an estimated 30% of the general population.<sup>[5]</sup> About 25 to 35% present with transient or occasional insomnia. The elderly in particular are affected by insomnia. Women are more likely to have more sleep difficulties than men. Despite such high prevalence, in most individuals it remains substantially underreported and undertreated. Sleep disturbance occurring atleast three times a week for atleast 1 month and causing either marked distress or interfering with social and occupational functioning is must for its diagnosis.<sup>[6]</sup> Insomnia may present with one or more of the following.<sup>[7]</sup>

- Difficulty in initiating sleep (going- off to sleep)
- Difficulty in maintaining sleep (remaining asleep)
- Non-restorative sleep where despite an adequate duration of sleep, there is a feeling of not having rested fully (poor quality sleep).

An insomniac patient may suffer from headache, drowsiness, day-time sleepiness, lack of concentration, impaired memory, fatigue etc.

Chronic insomnia could be primary or secondary .Difficulty in initiating or maintaining sleep for atleast a month that occur independently of any known physical or mental condition is known as primary insomnia. Secondary insomnia may occur due to medical, psychological or drug related causes. The neuroendocrine system may also provide evidence of arousal as demonstrated by chronic activation of the stress response system. Several studies measuring 24-hour urinary free cortisol excretion have found high levels in poor sleepers.<sup>[8,9]</sup> As insomnia is both a symptom and a disorder in itself, detailed evaluation of the problem is imperative before reaching a clinical diagnosis,<sup>[10]</sup> *Anidra* is a *vata-nanatmaj vyaadhi*. It causes *dukha* (pain), *karshyata*(physical weakness), *balahani* (loss of power or generalized weakness), *kaleibya* (infertility), *agyanata* (lack of consciousness) even mrityu(death).<sup>[11]</sup> All the pharmacological treatments of insomnia, as far as available provide only symptomatic relief to the patient instead of treating the disease on the whole. This enables patients to prefer a better, non-invasive, cost effective and most important a harmless treatment like *nasya*.

#### **Drug review**

Ashwagandha Botanical Name- Withania somnifera Family- Solanaceae

#### Rasa Panchak

Rasa- Katu tikta, kashaya Guna- Snigdha, laghu Veerya- Ushna Vipaka- Katu Effect on Tridosha- Balances tridosha especially kapha and vata.

#### Karma

Balya- improves strength and immunity, nerve calming effect Rasayan- improves life expectancy, anti-ageing Pushtiprada- improves body nourishment Anilam hanti- useful in vata disorders

*Ashwagandha* is considered one of the most important herbs and the best adaptogenic.<sup>[12]</sup> It is a *rasayana* (rejuvenator), hypnotic, nerve tonic, sedative, narcotic, tranquillizer, restorative, immunomodulator. So, it is very useful in treating anxiety, depression, chronic fatigue syndrome, adrenaline fatigue.

Chemical Composition- Laboratory analysis has revealed over 35 chemical constituents contained in the roots of *Withania somnifera* Sitoindosides and acylsterylglucosides in *ashwagandha* are anti-stress agents. Active principles of *ashwagandha* like sitoindosides VII-X and Withaferin-A, show significant anti-stress activity.

#### **Pharmacological Actions**

Among *rasayana* drugs, *ashwagandha* holds the most prominent place.Most of the *rasayana* herbs are adaptogen/anti-stress agents. Being a powerful adaptogen, it enhances the body's resilience to stress. It prevent adrenal gland changes of ascorbic acid and cortisol content produced during stress. Because of its cognition promoting effect, it is found useful in children with memory deficit and in old age people with loss of memory. It has GABA mimetic effect and promote formation of dendrites.

By virtue of its anti-oxidant property, it helps to protect against cellular damage caused by free radicals. *Ashwagandha* reduce brain levels of tribulin, an endocoid marker of clinical anxiety. It is a potent sedative. It increase energy, endurance and acts as an adaptogen that exerts a strong immunostimulatory anti-stress effect thereby producing sound sleep.

#### DISCUSSION

*Nidra* is the *upastambha* (sub-supporting pillar of life) that is essential in maintaining good health of a person. Happiness and sorrow, growth and wasting, strength and weakness, virility and impotence and the knowledge and ignorance as well as the existence of life and its cessation depend on the sleep.<sup>[13]</sup> The importance of sleep lies in the fact that it is considered among the vital signs. In this present "era of stress and anxiety", this important aspect of health is poorly affected by excessive stress. Improper sleep can increase risk of developing obesity, diabetes, high blood pressure or heart disease.<sup>[14]</sup> Conventional medical science is still lacking definite treatment for insomnia.<sup>[15]</sup> Sedatives and hypnotics which are commonly used, instead of eliminating the causative factor, pose negative impact on an individuals's health.

Excessive consumption of food with dry property, barley ,excessive exercise ,fasting ,and intercourse, hunger, uncomfortable bed, improper induction of *vamana* (emesis), *virechana* (purgation), *nasya* (nasal medications), *raktamokshana* (bloodletting), *dhooma* (medicated smoke).<sup>[16]</sup> are the main aetiological factors in producing *nidranasha*. Psychological causes-fear, anxiety, anger excessive sorrow, greed, agitation are also responsible for stress induced insomnia. *tamo guna* of mind along with *kapha dosha* helps in generating sleep. When our mind gets disturbed due to psychological factors like fear, anxiety, anger, excessive sorrow, greed agitation, there is increase in *rajo guna* which closely resembles with the *vata dosha*. Hence increase in *rajo guna* ultimately increases *vata dosha* & diminishes the effect of *tamo guna* ultimately leading to insomnia.

The literary meaning of the word *nasya* is being in the nose or the things beneficial to the nose. The medicine used in *nasya* being rapidly absorbed by nasal mucosa, is highly effective in curing stress induced insomnia. *Ashwagandha taila* in the form of *navana nasya* gets readily absorbed in the *shringataka* region. *Nasa* is the entry to *siras* (head).<sup>[17]</sup> The oil drops when administered into the nostrils, rapidly trasverse through the cribriform plate into CNS by olfactory neurons, supporting cells and surrounding capillary bed. One division of olfactory pathway by passes thalamus and olfactory systems have connection with limbic

system. Stimulation from *nasya* medicines can influence mood, sexual behavior, memory pattern, endocrinal functions. This nourishes the entire cerebral pathway thus enhancing the activity of HPA axis which is the key component in producing stress. The *ushna guna* of oil alleviates *vata vaigunya* Thus *navana nasya* produces effective results in the patients of stress induced insomnia.

#### CONCLUSION

Sleep is a golden thread that ties good health and our body together. Personal, professional and social performance of an individual all depends on it. So, it should never let be affected by taking unnecessary stress. Every upcoming challenge should be taken as an opportunity to grow and should be dealt peacefully. Any obscure case of stress induced insomnia should be properly diagnosed and treated accordingly. Cost effective, rapid absorption of *ashwagandha* oil by nasal mucosa even in minimal doses, no adverse effects make *navana nasya* superior to all other treatments.

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