



## CONCEPT OF SLEEP AND SLEEP DISORDERS IN AYURVEDA

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**ABSTRACT** Ayurveda proclaims the importance of Trayopastambhas (three pillars) for the systematic way of life. They are Ahara (food), Nidra (sleep) and Bramhacharya (celibacy). The literature explains the importance of maintaining a proper sleep to ensure good health and well-being. Good quality sleep rejuvenates the mind and body, while enabling effective functioning. It is considered as the important means to combat health as well as diseases. Another important function of sleep is enhancement of Ojas (energy) which helps to insulate the mind from daily stress and exertion. The concept of Nidra in Ayurveda is least explored in terms of its physiology, benefits, ill effects, sleep routine practices and various disorders caused due to variation in sleep quantity and quality. Even though the literary references are less on Nidra and Nidravikara (Sleep disorders), there are ample researches in Ayurveda citing its importance. This is a literary work to explore further possibilities in understanding concept of Nidra, disorders of Nidra and its management.

## KEYWORDS :

## Introduction

Sleep is a wide term which is used to imply various bodily functions regulated by it. In today's era, it has been a topic of great concern. Due to increased technologies, night shift duties, excessive social networking indulgence, stress etc. there has been some direct or indirect impact on the quality of a healthy sleep which in turn affects the health of an individual. Nidra is an essential phenomenon of life, which affects the physical as well as mental status of an individual. There is a wide description of sleep in Ayurveda as an important part of *Trayopastambha* as well as in context of various disorders. Acharya Charaka has described nidra in chapter of *Ashtauminditiya Purusha* in *Sutrasthana* and also included *Aswapna* (loss of sleep) in 80 *Nanatmajavatavikara*<sup>1</sup>. Acharya Sushruta explains it in *Sharir Sthana* in the chapter *Garbha Vyakaran Shariram*; which enlightens its role in nourishment and development of body<sup>2</sup>. Ashtanga sangraha describes nidra and *Nidravikara* in *Viruddhaanna-Vigyaniya Adhyaya*<sup>3</sup>. Ashtanga hridaya describes it in *Annaraksha Adhyaya*, while explaining *Traya-Upstambha*<sup>4</sup>. Sleep is the non-deliberate absence of thought-waves or knowledge. Dreamless sleep is an inert state of consciousness in which the sense of existence is not felt. Sleep is a state in which all activities of thought and feelings cease. Sleep can be defined as a condition of body and mind which typically recurs for several hours every night, in which the nervous system is inactive, the eyes closed, the postural muscles relaxed, and consciousness practically suspended. Understanding sleep and its mechanism is important not only for the physicians to treat, but for all individuals to understand their sleep pattern and to look out for any anomalies.

## Materials and Methods

This literary work is carried out compiling information from various Ayurvedic texts and is worked out based on various points like Definition of sleep, stages of sleep, classification of sleep, various sleep disorders and its management.

## Discussion

## Definition of sleep and sleep pattern:

Collin's Dictionary says "Sleep is the natural state of rest in which your eyes are closed, your body is inactive, and your mind does not think." Medical Science defines sleep as a state of temporary unconsciousness from which an individual can be aroused to a conscious state<sup>5</sup>.

As per Ayurveda, Nidra is the function of the mind which blocks perception from the external world. It is characterized by altered consciousness, inhibited sensory activity, reduced muscle activity and rapid eye movement. About 46% of adult population in the world suffer from one or the other kind of Sleep disturbances<sup>6</sup>.

The sleep pattern refers to the quantity and type of sleep which one gets, based on their age and health. Newborns require 12-18 hours, school Children 10 – 11 hours, adolescents 8 to 9 hours, adults 7 to 9 hours and elderly requires less than 7 hours<sup>7</sup>.

## Stages of Sleep and its types:

Sleep Cycle begins with NREM (Non –Rapid Eye Movement) followed by short period of REM(Rapid Eye Movement). Dreams occur during REM sleep. REM Sleep usually occurs 90 min after the onset of sleep and last upto 1 hour<sup>8</sup>. It is the period of intense dreaming, increased brain activity and paralysis of major voluntary muscles. NREM Sleep has 3 stages lasting from 5 to 15 minutes.

**Stage 1: Awaken state:** Eyes are closed, but can be awakened without any difficulty and if aroused, he/she feels as if not slept properly. There will be a feeling of falling causing sudden muscle contraction.

**Stage 2: Sleep spindles:** Spontaneous muscle toning with relaxation, slow heart rate and decreased body temperature and is the initial stage of entry into Deep sleep.

**Stage 3 : Deep Sleep:** Slow wave sleep and if aroused the individual feels disoriented. This is the state when body tissues repair, regenerates and there is changes in immune system<sup>9</sup>.

In Ayurveda, Nidra is mentioned as a avastha of manas. The manas has 4 stages

1. Jagrat Avastha –Awaken state – Perception via Panchendriya.
  2. Swapna Avastha –Feelings based on experiences in awaken state.
  3. Sushupta Avastha – Only life sustaining vital functions like respiration.
  4. Turya Avastha – State of control over both sleep and conscious state.
- Nidra is also classified into various types based on Brihat Trayee (Trifold Samhitas of Ayurveda). They are elicited in Table no. 1

Table no. 1 Classification of Nidra

Charaka Samhita	Susruta Samhita	Ashtanga Hridaya
1. Tamobhava	1. Tamasi	1. Tamobhava
2. Shleshma samudbhava	2. Vaishnavi	2. Kaphobbhava
3. Mana shareera srama sambhava	3. Vaikariki	3. Chitta khedaja
4. Agantuki		4. Deha khedaja
5. Vyadhi anuvartini		5. Agantuki
6. Ratri swabhavaja		6. Kala swabhavaja
		7. Amaja

Tamobhava Nidra or Tamasi Nidra refers to *Nidra* which is caused due to excessive tamo *Dosha*. *Shleshma Samudbhava* or *Kaphobbhava* is due to increased *Kapha Dosha* in *Shareera*. *Mana Shareera Shrama Sambhava* as well as *Deha* and *Chitta Khedaja* refers to *Nidra* caused due to exhaustion of mind and body. *Agantuki* refers to sleep induced due to any external factor like poison, sedation etc. *Vyadhi Anuvartini* or *Vaikariki* refers to *Nidra* caused due to any diseases. *Amaja* *Nidra* is sleep induced due to *Ama*. *Vaishnavi* *Nidra* is sleep caused by blessings

of Lord Vishnu or can be understood as superconscious sleep. Among this, *Ratriswabhavaja* Nidra is considered as the ideal sleep which is bestowed due to the changes in the environment as well as in the individual<sup>10</sup>.

### Physiology and benefits of Nidra:

Acharya Charaka in *Sutra Sthana*, Chapter 21, explains that sleep is induced when an individual is detached from *Bahya Vishaya* leading to *Klama* of *Shareera* and *Manas* resulting in *Vridhhi* of *Kapha* and *tamo Dosha* causing *Nidra*. If an individual is able to sleep well without any physical or mental difficulties, there are certain benefits that an individual gets<sup>11</sup>. A good night's sleep bestows with *Sukha*, *Pushti*, *Bala*, *Vrishata* and *Jnana*, whereas its *Heena-Mithya-Ati* yoga leads to *Dukha*, *Karshya*, *Abala*, *Kleebata* and *Ajnana*.

### Nidravikara (Sleep Disorders):

ICD 10 enumerates F50-F59 as Behavioural Syndromes associated with physiological disturbances and physical factors which includes Non Organic Sleep Disorders (F51) and Organic Sleep Disorders (G47)<sup>12</sup>. Non Organic Sleep Disorders includes: Dyssomnia and Parasomnia. Dyssomnia is defined as a Primary psychogenic condition in which predominant disturbance is in quantity, quality and timing of sleep due to emotional causes. Parasomnia refers to abnormal episodic events (either body movements or behaviors) occurring during sleep.

Nidranasha is one among the 80 Vataja Nanatmaja Vikaras and Alpanidra, Anidra, Nidravighata are used synonymously. Karma, vaya, vyadhi, Prakriti and Vata Dosha are explained as the causes for Nidranasha. Indulging in activities which does vata prakopa, old age, due to certain diseases, Vataja Prakriti and increased Vata dosha in Shareera<sup>13</sup>.

Nidranasha, Atinidra, Klama, Glani, Tandra etc are few of the other pathological conditions mentioned in various literatures in Ayurveda. These terminologies have varied understanding and they do differ in its perception. Few of them can be considered as a symptom and few others can be a diagnosis. These are different states caused due to *Atiyoga*, *Mithyayoga* and *Heenayoga* of *Nidra*. There are certain conditions in Ayurveda which mentions about the different pathological states of *Nidra*, like:

Excessive sleep (*Nidradikya*) is seen in *Shleshmaja jwara*, *Raktaja gulma*, *Kaphaja gulma*, *Kaphaja umada*, *Kaphaja udara*, *Atisara*, *Pandu* etc. Stupor (*Tandra*) can be understood as a condition where an individual feels tired as if they are going to sleep. This is seen in *Kaphaja Visarpa*, *Kaphaja Shotha* etc. Loss of sleep (*Nidra alpatha*) is seen in *Sannipataja jwara*, *Shwasa*, *Agnivisarpa* etc.

### General treatment protocol for Nidranasha:

*Bahya chikitsa* like *Abhyanga*, *Utsadana* with *Chandanadi Taila*, *Ksheerabala Taila* etc, *Takradhara*. Internal administration of *Anupa Rasa*, *Shali Anna*, *Dadhi*, *Ksheera*, *Sneha Dravya*, *Madhya* etc. Psychological aspects like pleasant fragrance, mild music, *Pranayama*, *Yoga Nidra* etc, Other procedures like *Netra Tarpana* with *Ghruta*, *Shirolepa* and *Mukhalepa* with *Chandana*, *Usheera*, *Goksheera* etc. Environmental factors like clean and neatly set bed, peaceful room and the timely routine of sleep helps in inducing good sleep are explained by Acharya Charaka in the management of *Nidranasha*.

The most commonly used formulations are *Saraswatarishta*, *Aswagandharishta*, *Draksharishtam*, *Ashwagandha Avaleha*. *Chyavana Prasha*, *Kalyanaka Ghruta*, *Manasamitra Vataka*, *Samshamani Vati*, *Brahmi Vati*, *Sarpagandhadi Vati*, *Ashwagandha Churna*, *Mandukaparni Churna*, *Jatamansi Churna*, *Narayana Taila*, *Himasagara Taila*, *Ksheerabala Taila*, *Jatipatri Ksheerapaka* etc and these are to be administered in doses specific to the age, condition of *Vyadhi* and to the *Prakriti* of the individual.

### Conclusion

This is an attempt to understand various basic aspects of sleep like definition of sleep, stages of sleep, classification of sleep, various sleep disorders and its management in a simpler form. In purview of futuristic literary work, compilation from all Samhitas can be incorporated for better understanding.

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