# STUDY THE PHYSIOLOGY OF NIDRA (SLEEP) AND ITS APPLIED ASPECTS

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#### Abstract:

Ayurveda has two basic aims: First, to preserve the health of healthy people and to help them attain the four principle aims of life (virtue, purpose of wealth, pleasure, and liberation from cycle of rebirth); so in order to maintain healthy status Aahara (food), Nidra (sleep) and Bhrahmacharya (controlled sex) are given prime importance under the name of "Trayopastambha" the sub-pillars of life. The strength, complexion, and compactness of the individual body depend on these three factors. [1,2] Sleep is natural phenomenon, important for normal physiology to provide rest and relaxation to body, mind, and senses which get tired and exhausted due to the wear and tear process occurring in due course of daily routine. Adequate amount of sleep as well as suitable timing of sleep is essential for the maintenance of healthy status. Disturbed pattern of sleep may lead to some major illness. Therefore, healthy sleep is one of the essential components for the completely disease-free health of individual.

## **Keywords:**

Nidra, Sleep, Vaishnavi, Trayopastambha, Kapha, Prakriti

Sleep is a basic human need, important for maintaining healthy status and therefore considered as one of the trividha upstambhas. Acharya Charaka says that Nidra (sleep) is dehastithikarini, means just like food, sleep is the factor responsible for existence of living body.[2]

According to Acharya Sushruta, Nidra is a state of human body when the sense organs (Indriyas) disconnects themselves from their objects of grasping (Vishaya), and enters a state of trans. [1] Acharya Vagbhata says that Nidra is caused by tamoguna due to aavarana of kapha dosha and is composed of tamoguna as well and generally occurs at night. Sleep is also mentioned as adharniyavega, means an urge which should not be controlled. If controlled, may lead to delusion, excessive yawning, malaise, squeezing pain all over the body, drowsiness, lassitude, and heaviness in head and eyes etc. All of these can be resolved with good sleep and mild massage. [1,2,4]

# Mechanism of Nidra: It is explained under 4 theories.

- 1) Tamoguna Theory: In Darshanas, Tamasa has been held responsible for ignorance, less of consciousness, inattention, and sleep. At night since the tamasa guna being powerful, it covers the higher psychic centres and manifests the sleep. According to Acharya Sushruta, chetanasthanam (place of sense) i.e. Hridaya get covered by tamoguna, mind becomes tamodhika and indriya becomes inactive and sleep occurs.[1]
- 2) Kapha Dosha Theory: Kapha dosha is supposed to be composed of mostly tamasa guna. Whenever chetanasthanam get covered by the accumulation of tamasa guna, the sensory channels get blocked by the kapha dosha. When this shleshma is oversaturated by the tamoguna then the sleep occurs. [1,2]
- 3) Depression Theory: Acharya Charaka propagated this theory, when mind along with the soul gets exhausted, or becomes stationary, and the sensory and motor organs also become inactive, then the person goes to sleep.[2]
- 4) Swabhava Theory: Even after the description of role of tamasa guna in sleep, Acharya Sushruta says that it is a natural instinct, which forms the most powerful cause for sleep. Acharya Charaka counted Nidra as swabhavika by nature and the night serves as causative factor for sleep. [1,2]

# Types of Nidra:

Types of Nidra in Ayurveda	Acharya Charaka (Ch.Su.21)		Acharya Sushruta (Su. Sha.4)	Acharya Vagbhata (A.H.Su.9)
Swabhavika (natural)	Tamobhava		Vaishnavi	Tamobhava
Aswabhavika (abnormal)	ShleshmaSamudbhava		Tamasi	ShleshmaSamudbhava
	Manah ShramaSambhava	Sharira	Vaikariki	ManahShramaSambhava
	Aagantuki			Sharira ShramaSambhava
	Vyadhyanuvartini			Aagantuki

R	Ratr iSwabhavaPrabhava	Vyadhyanuvartini
		Ratri SwabhavaPrabhava

Sr.No.	Types of Nidra	Cause of Nidra
1	Tamobhava Nidra	Excess of tamasa guna
2	ShleshmaSamudbhava Nidra	Excess of kapha dosha
3	Manah Sharira ShramaSambhava Nidra	Physical and mental fatigue
4	Aagantuki Nidra	Adventitious
5	Vyadhyanuvartini Nidra	Sequelae of diseases
6	RatriSwabhavaPrabhava Nidra	Occurring during night physiological sleep

# Factors affecting the Nidra:

1) Nidra and Prakriti: Quality of sleep varies according to the dehaprakriti. Persons of kapha prakriti gets more sleep which is sound also. Apart from deha prakriti manasa prakriti also influences the sleep pattern. Person of tamasika type of prakriti can sleep at any hour of the day. Those with rajasika type of person sleep either daytime or the night-time and their sleep is light and disturbed. [1,2,3,8]

2) Nidra and Shayya (Bed): [1,3]

Nidra and Shayya (Bed): [1,5]		
Sr. No.	Type of Shayya	Effect of body
1	Cot	Neutralises all three doshas
2	Bed on ground	Neutralises vata & kapha
3	Ground	Increases vata, neutralises rakta and pitta, obesity.
4	Plank of wood	Increases vata
5	Comfortable bed	Increases happiness, sexual desire and helps in getting rid of excess of vata and exhaustion.

3) Sleeping posture:

Sr. No.	Sleeping position (Head)	Effect on body
1	Purva (East)	Medhavi (Improves Intellect)
2	Paschima (West)	Manasantapa (Mental Distress)
3	Uttara (North)	Mrityu (Death)
4	Dakshina (South)	Dirghayu (Long Life)

According to YogaRatnakara, it is always advised to sleep in left lateral position because agni lies in the left side of the body above the nabhi (umbilicus), which is responsible for the proper digestion. [5]

4) Nidra and Vayo-avastha: Sleep also depends on vayo-awastha (age); in balyawastha kapha is predominant so sleep is comparatively more than yuvavastha. In vruddhavastha vata is predominant so they get very less sleep. [4,8] Recommended amount of sleep in different stages of life: [9]

Sr. No.	Age	Amount of sleep
1	New-born	16-18 hrs/day
2	Pre-school aged children	11-12 hrs/day
3	School aged children	At least 10 hrs/day
4	Teens	9-10 hrs/day

5	Adults (including the elderly)	7-8 hrs/day

5) Nidra and Doshas: As Nidra is said to be kapha dominant in process, it also maintains the equilibrium between three doshas. Bad habits like ratri-jagarana (awakening during night) diva-swapa (sleeping in the day) vitiates all the three doshas. [1,2,3,8]

Sr. No.	Doshas	Nature of sleep
1	Vata dosha	Nidranasha (loss of sleep)
2	Pitta dosha	Alpa Nidra (less sleep)
3	Kapha dosha	Ati Nidra (excess sleep) & Tandra (drowsiness)

**6) Nidra and Diseases:** [1,2,3,9]

Sr.No.	Sleep pattern	Diseases
1	Day sleep	Sthoulya (obesity), kaphajajwara (type of fever due to kapha), kaphajaarsha (type of haemorrhoid due to kapha), visarpa (skin disease), vatarakta (gout)
2	Sleep in excess	Antahvidradhi (internal abscess)
3	Sleeping in daytime and keeping awake in night	Shirorogas (diseases of head), nijashotha (oedema)
4	Sleeping with face down	Mukharoga (diseases of mouth)
5	Untimely sleep pattern	Ajirna (indigestion)
6	Sleeping on uncomfortable bed	Vata vyadhi (diseases due to vata dosha)
7	Comfortable sleep for long time	Prameha (group of urinary diseorder), madhumeha (diabetes)
8	Staying awake at night	Karshya (emaciation), pratishyaya (catarrh)

7) Karmukatva of Nidra at different Dhatu level: [1,2]

Sr.No.	Dhatus	Effect on body
1	Rasa dhatu	Pushti, Varnaprasadana
2	Raktadhatu	Varnaprasadana, Agni Deepti
3	Mamsadhatu	Pushti, Bala
4	Medasadhatu	Attractiveness
5	Asthi dhatu	Bala
6	Majjadhatu	Utsaha
7	Shukradhatu	Ojasa, ManasaSukha

# **Conclusion:**

Sleep is one of the basic instincts of life. Health and longevity are conquered by proper sleep. According to Ayurveda, happiness and unhappiness, nourishment and abnormalities, strength and debility, sexual process and impotence, knowledge and ignorance, life and death-all depends on sleep. [4] Correct quantity and quality of sleep is necessary in disconnecting the tired mind from senses and also regarded as one of the most powerful tool to combat minor diseases and imbalance. The most important function

of sleep is enhancement of ojasa-the master co-ordinator between mind, body, and soul. Thus, by means of proper sleep dhatusamya, nourishment of body, increases of strength and the stability of Ayu are achieved.

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