

A REVIEW ON CONCEPTUAL RELATIONSHIP BETWEEN NIDRAVEGADHARANA AND MANIFESTATION OF STRESS AMONG IT PROFESSIONALS

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ABSTRACT

Ayurveda highlights the importance of *Vegadharana* as a principal causative factor of diseases. *Vega* are the natural physiological urges mainly operated by *Vata Dosha*. There are different types of *Vega* associated with different *Srotases* in the body concerned with specific functions. In the current mechanized life culture, stress has become an important factor in the disease causation. Stress, in general, is a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation. In other words, stress is defined as the disruption of internal biological equilibrium triggered by external physical, mental or other types of stimuli. Job related stress considerably affects the performance of the employees and lead to multidimensional health issues. Information technology professionals are more affected by stress because of their high pressure work nature. Ayurvedic science has significant importance in stress management, especially in job related stress. Ayurveda underlines the pathological importance of various causative factors in the manifestation of stress. Continuous *Vegadharana* leads to specific *Dosha* vitiation followed by defined *Dosha* – *Dushya Sammurchana*. Different types of *Vegadharana* has different pathological route towards the manifestation of stress. IT professionals suffer from disturbances in sleep due to their shift pattern of work. Suppression of sleep causes delusion, feeling of heavyness of the head and eyes, lassitude, too many yawnings and squeezing pain all over the body. *Nidra Vegadharana* have got more practical significance in the manifestation of stress among IT professionals because it initiates specific *Samprapti* stages affecting different biological factors and finally resulting in serious stress episodes. Good sleep and mild massaging are the ideal treatments for suppression of *Nidra Vega*. Sleeping at improper time also causes delusion, fever, lassitude, nasal catarrh, head ache, dropsy, oppression in the chest, nausea, obstruction of the tissue pores and weakness of digestive function. For this fasting, emesis, sudation and nasal medications are the treatment.

Keywords: Stress, *Nidra* (sleep), *Vegadharana* (forceful suppression of natural physiological urges)

INTRODUCTION

Vega are the natural physiological urges in the body. Different Vega are associated with different Srotases in the body associated with specific functions. Suppression of Vega is harmful to the body and leads to diseases⁽¹⁾. Vega are generally under the control of Vata Dosha. Vegadharana mainly leads to Vatakopa⁽²⁾. Stress is a physical or emotional factor which results in physiological changes in body and mind and may be a causative factor of various psychosomatic diseases in long run. Stress causes functional disturbances in the harmony of Doshas. Stress behaves as a causative factor and pathological factor. Continuous and uncontrolled stress will affect various physiological pathways in the body and mind. Suppression of certain Vega like Nidra leads to stress through a specific Samprapti. Mind and related functions are chiefly operated by Vata⁽³⁾. Vegadharana also leads to Vata vitiation. Hence Vegadharana can contribute to stress especially among IT professionals who have day night shift pattern with a high pressured job culture associated with multiple causative factors.

CONCEPT OF VEGADHARANA

Ayurveda explains about various preventive protocols against different types of physical and mental diseases. Among the Tridoshas, Vata is considered superior because of its sudden, independent and powerful dynamic actions in human physiology⁽⁴⁾. Vata Dosha exerts action in other Doshas, Dhatus, Malas and Srotases. Vata Dosha controls Agni and mind⁽⁵⁾. Vegas are the natural physiological urges related with different functional organ systems. There are 13 Vegas mentioned in Ayurveda which are not to be suppressed. The urges of Adhovata (flatus), Vit (faeces), Mutra (urine) Kshavadu (sneeze), Trishn, (thirst), Ksut (hunger), Nidra (sleep), Kasa (cough), Sramaswasa (heavy breathing on exertion), Jrimbha (yawning), Asru (tears), Chardi (vomitting) and Retas (seminal discharge) are the 13 Vega in this list⁽⁶⁾. All the ex-

cretory functions in the body are regulated and controlled by Vata. Micturition and defecation are controlled by Vata only⁽⁷⁾. Vega include mainly natural reflexes. Important reflexes in the body are under the influence of Vata Dosha. Sneezing, coughing, vomiting, ejaculation etc are also coordinated by Vata Dosha in concerned Srotases. Appetite and thirst are also considered as Vega which are also controlled by Vata Dosha. Timely execution of Vega is very much essential to maintain the normal physiological rhythm in different organ systems. Hence Ayurveda underlines certain important rules regarding the Vegapravruthi. The forceful execution and forceful suppression of Vega are equally harmful to the body.

BASIC THEORIES AND PHYSIOLOGIC EFFECTS OF SLEEP

The passive theory of sleep (fatigueness of the reticular activating system) is now replaced by the view that sleep is caused by an active inhibitory process. Some special centre located below the midpontine level of the brain stem that is required to cause sleep by inhibiting other parts of the brain. Stimulation of the raphe nuclei in the lower half of the pons and in the medulla causes natural sleep. Nerve fibres from these nuclei spread locally in the brain stem reticular formation and also upward into the thalamus, hypothalamus most areas of the limbic system, and even the neocortex of the cerebrum. Fibres also extend downward into the spinal cord, terminating in the posterior horns where they can inhibit incoming sensory signals, including pain. Many nerve endings of fibres from these raphe neurons secrete serotonin, which is a transmitter substance associated with the production of sleep. Stimulation of some areas in the nucleus of the tractus solitarius can also cause sleep. This nucleus is the termination in the medulla and pons for the visceral sensory signals entering by of the vagus and glossopharyngeal nerves.

Sleep causes two types of physiologic effects; first effects on the nervous system, and second effects on the other functional systems of the body. ⁽⁸⁾

VEGADHARANA AS A CAUSATIVE FACTOR

Vegadharana is an important *Nidana* for vitiation of *Doshas* in the body. *Adharaneeya Vegas* are never to be suppressed. Continuous habit of suppressing *Adharaneeya vegas* gradually lead to *Vata Dosha* vitiation. *Vatakopa* will be manifested in different *Srotases* depending upon the degree of concerned *Srotodushti*. Different *Vegadharanas* affect different *Srotases* and organ systems in the body. *Vegapravruthi* are the coordinated event of *Vata Dosha* and related *Srotas*. Hence, alterations in *Vegapravruthi* will lead to *Khavaigunya* in the concerned *Srotas*. This *Khavaigunya* will lead to abnormal and inhibited movements of *Vata dosha*. As a consequence, *Vatapratilomata* will be resulted. When *Vata* is in *Anuloma* stage, the *Sroto* related functions will be smooth. On the other hand, *Vatapratilomata* causes anatomical and functional abnormalities in the involved *Srotas* ⁽⁹⁾. Since *Vatapratilomata* is a chief pathological event, it causes multidimensional impacts in body and mind.

Lack of sleep certainly does, however affect the function of the central nervous system. Prolonged wakefulness is often associated with progressive malfunction of the thought processes and sometimes even causes abnormal behavioral activities. Principal value of sleep is to restore natural balances among the neuronal centres. ⁽⁸⁾

NIDRA VEGADHARANA AND STRESS

Nidra is mentioned as *Bhoothadhathri* as it is an absolute necessity of all living beings ⁽¹⁰⁾. Ayurveda gives high importance to sleep. *Acharya Susruta* explains *Nidra* as *Sleshma – Tama* combination ⁽¹¹⁾. Sound sleep provides *Sukha* (happiness), *Pushti* (nourishment) *Bala* (strength) *Vrishada*

(sexual powers), *Jnana* (knowledge) and above all a good life ⁽¹²⁾. Hence if sleep is altered the above modalities will not be achieved.

Most of the IT professionals have shift pattern in their work which disturbs their normal night sleep. Thus, lack of sleep during night and compensatory daytime sleep make unwanted changes in their daily life. IT professionals seriously suffer from problems of suppression of sleep. Most of the computer professionals are not able to adjust with their shift pattern of work. Often they have to work continuously during night hours without even a break. Especially those who work in call centers have serious stress problems due to lack of sleep during night time. Lack of sleep during night will lead to *Vata* vitiation and this in turn affects the normal physical and mental function ⁽¹³⁾. Stress is caused by physical and mental stimuli that disturb the functions related with both body and mind. Here *Nidra Vegadharana* acts stress stimuli with both physical and mental domains. Since all the higher mental functions are controlled by *Vata Dosha*, *Vata* vitiation will aggravate the effects of mental stress. *Vata* vitiation occurring as a result of *Nidra Vegadharana* go to the next stage of *Sthanasamsraya* in different *Dhatus* and mind. *Dhatugatha vata* vitiation will lead to different types of physical and mental stress responses. *Rasa Dhatu* when affected leads to cardiovascular abnormalities. *Rakta Dhatu* when affected leads to circulatory issues. The effects of lack of night sleep are also reflected in *Koshta* and *Agni*. Pathologies related with *Annavaha Srotas* are triggered by derangement of *Agni* ⁽¹⁴⁾. Problems related with *Agni* will lead to formation of *Ama* ⁽¹⁵⁾. *Ama* leads to *Srotorodha* in different *Srotas* with *Balabhramsa* thereby aggravating the stress responses ⁽¹⁶⁾. Thus most of the IT professionals who have night time work suffer from diseases of Gastro intestinal system.

The nature of shift pattern especially in the IT professional sector often forces the employees for *Nidra Vegadharana*. *NidraVegadharana* if practiced

continuously will lead to disturbances in *Agni* also. Moreover *NidraVegadharana Lakshanas* include *Gourava* of head and eye, *Aalasya*, *Jrimbha* and *Angamarda*⁽¹⁷⁾. All these features have a strong relation with *Vatakopa*.

DISCUSSION

As per Ayurveda, human physiological domains are influenced by different biological factors. *Tridoshas* being the basic factors of health are disturbed by multiple causes. *Vata Dosha* is the most important among *Tridoshas* because of its independent nature. *Vegadharana* is the forceful suppression of various physiological urges. Sound sleep is an essential component for a healthy life. Suppression of *Nidra Vega* leads to different problems in both body and mind. *NidraVegadharana* leads to vitiation of *Vata*. *Vata* regulates the functions of mind. Hence the resultant *Vatakopa* leads to disturbances in other *Srotases*. Stress responses are mainly due to physical and mental stimuli. Suppression of sleep is an important cause for stress. Job related stress are caused or aggravated by disturbances in the professional and personal life. Continuous *Vata* vitiation will impair the functions of vital systems in the body. Mental faculties start misbehaving on prolonged periods of *Nidra Vegadharana* and *Vatakopa*. *Dhee*, *Dhriti* and *Smriti* are the mental faculties which regulate higher mental functions⁽¹⁸⁾. These factors when they are in normal stage are the protective factors against mental stress. *Nidra Vegadharana* and resultant *Vatakopa* create abnormal functioning in *Dhee*, *Dhriti* and *Smriti* which in turn leads to stress responses. Digestive disturbances, head ache, difficulty in concentration, depressive behaviors are directly related with *Nidra Vegadharana*. Prolonged disturbances in *Agni* and *Annava Srotas* leads to the formation of *Ama* and subsequent functional decline in *Koshta* and *Sakha*⁽¹⁹⁾. *Vataprathilomata* in *Koshta* leads to different features in different *Dhatus*. Most of the features of *Vataprathilomata* are very much similar to stress manifesta-

tions. Pathologies like *Arsa* and *Udhavarta* are the ultimate products of *Vataprathilomata* and these *Sampraptis* leads to serious disturbances in both body and mind⁽²⁰⁾. *Udhavarta* affects mind and leads to abnormalities in mental functions similar to mental stress⁽²¹⁾. Hence it is important to avoid *Nidra vegadharanato* prevent further *Kriyakalas* leading to stress and related functional disturbances in different *Srotases*.

The primary sleep promoting neurotransmitter is serotonin, while catecholamines were considered to be responsible for wakefulness. Few *Pertides* are also identified as sleep promoting substances. Many sleep factors, including interleukin 1 and prostaglandin E, are immunologically active as well, suggesting a link between immune function and sleep-wake states.

IT professionals with sleep disturbances comes under the Circadian rhythm sleep disorders. loss of sleep results in stress disorders. circadian timing system of the average night shift workers fails to adapt successfully to such work schedules. This leads to a misalignment between the desired work-rest schedule and the output of the pacemaker in disturbed day time sleep. Consequent sleep deprivation and misalignment of circadian phase produce decreased alertness and performance. In addition, shift workers have higher rates of cardiac, gastrointestinal and reproductive disorders.⁽²²⁾

Those suffering from very little sleep (or no sleep at all) should indulge in the use of milk, meat soups and curds as food. oil massage and mild squeezing of the body and bath, anointing the head, ears and eyes with nourishing oils, harbouring the feeling of satisfaction (of having done good deeds), and restoring the things which are comforting to the mind as much as desired, these bring about the pleasure of good sleep.⁽²³⁾

CONCLUSION

Vegadharana is one of the most important causes for different systemic diseases. *NidraVegadharana* leads to *Vata Dosha* vitiation. *Vata* is the superior *Shareerika Dosha* and also controls the functions of *Mana*. Stress is mainly due to physical or mental stimuli which cause disturbances in the internal biological equilibrium. Disturbed and interrupted sleep is very common in the IT profession due to their work culture. Here *Nidra Vegadharana* acts as a stress stimuli. *Nidra Vegadharana* leads to impairments in both *Sareerika* and *Manasika Doshas*. *Nidra Vegadharana* causes stress, and stress leads to *Nidranasa*. Detailed Ayurvedic understanding on the mutual *Hetu - Linga* relationship of *Nidra* and stress is very important to prevent the severity of stress manifestation, especially in IT population.

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