



## YOGA NIDRA AND ITS THERAPEUTIC APPLICATIONS

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### ABSTRACT

Yoga nidra is said as the art of relaxation. Within the last century or two, diseases have sprung up with new dimensions, expressions, manifestations and this has reached a peak in the last few decades. Medical science has put an end to the great plagues of the past, but we are now faced with a new epidemic of stress-related disorders caused by our inability to adapt to the highly competitive pace of modern life. Psychosomatic illness such as diabetes, hypertension, obesity, thyroid disorders, migraine, asthma, ulcers, digestive and skin disorders are said to arise from the tensions of body and mind. The leading causes of death in developed countries like cancer and heart disease also stem from tension. Though Modern medical science has been trying to tackle these problems in many ways, but have failed to deliver the good necessary health to man. This is because the real problem does not lie in the body it originates from the man's changing ideals, his way of thinking and feeling. The International problem today is not hunger, poverty, drugs or fear of war. It is tension, hypertension and the total tension. One who knows to free from tension and is able to balance the tensions control the emotions and anger will be able to control high blood pressure, heart disease etc diseases.

Whether one thinks too much or don't think at all, he accumulates tension. In the same way, whether one works or doesn't work, sleep too much or doesn't sleep at all, whether take a heavy protein diet, carbohydrate diet or a vegetarian diet, he accumulates tension. These tensions amass in the different layers of the human personality. They accumulate in the muscular, emotional and mental systems. Yoganidra deals the problems of tension with a wide periscope. In yoga, relaxation from tension is one of the chief concerns and thus by the practice of yoga nidra, the nature of mind can be changed, diseases can be cured and the creative genius can also be restored.

**KEYWORDS:** Yoga nidra, Asthma, Pain

### INTRODUCTION

Yoga Nidra is a more efficient and effective form of psychic and physiological rest and rejuvenation than conventional sleep. It is a simple yet profound practice that induces deep relaxation into the whole body-mind system in a conscious way. Yoga nidra, derived from the tantras, is a powerful technique in which one learns to relax consciously. It's also called as the state of dynamic sleep. Yoga nidra is a systematic method of inducing complete physical, mental and emotional relaxation. The term yoga nidra is derived from two Sanskrit words, yoga meaning union or one-pointed awareness and nidra means sleep. During the practice of yoga nidra, one appears to be asleep, but the consciousness will be functioning at a deeper level of awareness. For this reason, yoga nidra is often referred to as psychic sleep or deep relaxation with inner awareness.<sup>1</sup>

#### Birth of Yoga Nidra

This technique was found and formulated by Swami Satyananda Saraswati of Bihar school of yoga many years ago.<sup>1</sup> Chapter four of **Hatha Yoga Pradipika** also speaks of *yoga nidra*. Here, the author has mentioned the word *yoga nidra* only once in this chapter. While discussing the practice of various *mudras*, Swami Swatmarama indicates that one should practice *Khechhari Mudra* until *yoga nidra* is attained. Once *yoga nidra* is attained there remains no such thing as *kala*.<sup>2</sup> In **Hatarathnavali**, yoganidra is said as an asana, where in the legs are wound around the neck and hands are tied on the back and lied down. This is said to improve the positive health.<sup>3</sup>

#### Experiments with Yoga Nidra

After devising the practice, Swamiji experimented and succeeded by trying it on various modes including him, disciples, children and also on dog. The instructions were given on the subjects while they were on sound sleep and found out that, though when one is in deep sleep, self will be awake, will have more awareness, more potential and

therefore can learn more and this is how swamiji utilized yoga nidra for the evolution of mind.<sup>1</sup>

#### Secret of Yoga Nidra

When the relaxation is complete, receptivity will be greater but when the consciousness is connected to all the senses, receptivity will be less. This is the secret of yoga nidra. When one withdraws the mind a little bit and enter into a state where they are neither in deep sleep nor completely awake, whatever the impressions enter the mind at that time become powerful, and they remain there. For example; there are distinct levels of mind. Some are very hard and some are very tender. The conscious mind is like hard soil because it has intellect and logic in operation.<sup>1</sup>

#### Therapeutic Applications

Yoga nidra has widespread application in the management of diseases of all kinds and its effect both as a palliative and curative has been investigated in many research centres around with extremely favorable results. Yoga nidra can be utilized either alone or in conjunction with other conventional forms of medical therapy. It has been found useful in both acute and chronic conditions especially in degenerative and stress-related conditions such as hypertension, coronary heart disease and arthritis. Diseases with a high psychosomatic component like asthma, peptic ulcer and migraine has responded favourably to yoga nidra therapy. Yoga nidra also plays an important palliative role in the fields of rehabilitation and geriatrics where intractable pain, loss of motivation and psychological depression pose major barriers in conventional treatment. In addition, yoga nidra has its most widespread application as a preventive measure to be practiced by healthy, active people as a means of relieving accumulated tensions, increasing stress resistance and overall efficiency and preventing the development of psychosomatic diseases.<sup>4</sup>

#### Psychiatric diseases

Yoga nidra is an effective adjunct to traditional forms of psychiatric treatment especially in cases which are not

responding to routine psychotherapy.<sup>5</sup> It's also a successful therapy for both recent and long standing psychological disturbances of all kinds, especially high anxiety levels and neurotic behavioral patterns.<sup>6,7</sup> The practice of yogic relaxation has been found to effectively reduce tension and improve the psychological well-being of sufferers from anxiety. Even severely disturbed people can be taught to practice on their own and to relieve mounting fear or anxiety in any setting and not only during regularly scheduled therapy sessions.<sup>8</sup>

#### **Psychosomatic diseases**

Yogic relaxation therapy has been effectively prescribed in conjunction with other medical and yogic procedures in the management of severe psychosomatic diseases including cancer, bronchial asthma, colitis and peptic ulcer. These are the disease conditions in which psychological factors usually play a prominent role.<sup>1</sup>

#### **Problems of Children**

Yoga nidra relaxation and visualization are also excellent therapeutic techniques for children with behavioral problems and maladaptive social and environmental responses. Paediatricians, child psychologists and remedial educators are now investigating it as an exciting new adjunct or alternative to more traditional modes of treatment using drugs and psychotherapy. For example, in studies conducted in the USA and Europe, hyperactive children who were taught yoganidra displayed significantly decreased hyperactivity levels, improved attention span, decreased fidgeting, with fewer random movements, noises, actions and reduced levels of skeletal muscle tension.<sup>9</sup>

#### **Drug addiction**

Yoga nidra is also being used in psychiatric admission units<sup>10</sup> enabling patients to reduce dependency on tranquilizing and hypnotic drugs and to increase their self-reliance, thereby reducing their hospital stay. Yoga nidra is also being taught as a suicide preventive to highly disturbed and depressed patients.<sup>11</sup>

#### **Insomnia**

It is also a successful treatment for insomnia producing definite results<sup>12</sup>

#### **Addiction of Tobacco, alcohol**

In response to elevated levels of stress in modern life, addiction to tobacco, alcohol and other stimulants and depressants has become a big problem. Many people think that smoking or drinking helps to relax. By reducing the deep seated conflicts and tensions, yoga nidra promotes a general feeling of wellbeing, which helps to curb excessive consumption of coffee, cigarettes and alcohol as well as aiding in the management of drug abuse and addiction.<sup>13</sup>

#### **Degenerative diseases**

The influence of yoga nidra on chronic degenerative diseases has been investigated in several countries. In one study conducted with patients suffering from major long term disabilities, at the University of California Medical Centre at Davis (USA), researchers concluded that yoga nidra is applicable for bedridden, incapacitated and chronically afflicted patients of all degrees.<sup>14</sup>

#### **Pain**

Yoga nidra probably relieves migraine pain by stimulating the pituitary gland to release its own potent pain-suppressing compounds. The ability of yoga nidra to control migraine pain was investigated in a study at the Presbyterian University College, Hospital, Pittsburgh (USA), in which the

need for analgesic medications was eliminated or markedly reduced among the 54 patients participating in the study and after follow up of 6 weeks of yoga nidra therapy, patients reported an average of 81% effective pain relief.<sup>15</sup> Another study of migraine sufferers at the Menninger foundation in Kansas (USA) reported 80% effective relief of symptoms using biofeedback facilitated yoga nidra, and other studies have produced similar findings.<sup>16,17</sup>

#### **Arthritis**

Yoga nidra has also been used successfully in the management of chronic arthritic pain.<sup>18</sup>

#### **Pregnancy and Menstrual problems**

Yoga nidra also has an important role in the techniques of natural childbirth, in which deep physical relaxation and spontaneous breath awareness form the basis for drug free labour and delivery.<sup>19</sup> In a study conducted at East Texas University (USA), researchers concluded that yogic relaxation training should be prescribed more frequently as an adjunct or alternative to conventional drug therapy for menstrual pain and disorders.<sup>20</sup>

#### **Geriatrics**

Yogic relaxation helps elderly people overcome many of the specific psychological difficulties related to old age, according to a recent study conducted in a French Geriatric hospital. They concluded that yoga nidra is especially helpful for those elderly patients who habitually transfer their psychological difficulties into physical symptoms and complaints associated with their advancing age. The elderly patients who learned and practiced yoga nidra on a daily basis were more capable of recognizing and managing their problems, maintaining good health, a confident, active and independent lifestyle and a bright outlook towards the future. In addition, physicians participating in the study reported that yoga nidra improved their personal and situational difficulties, thus enabling a more fruitful therapeutic relationship to develop.<sup>21</sup>

#### **Asthma**

As with any form of therapy, the degree of response by the asthmatic to yoga nidra is influenced by factors such as age and the severity of the condition. Nevertheless, a highly significant reduction in frequency and severity of attacks has been reported in asthmatic patients who practice yoga nidra. Many have been able to greatly reduce their dependency on drugs, while a significant proportion have been able to discontinue medication altogether.<sup>22,23</sup> In one study, 18 out of 27 asthmatic patients showed improvement in respiratory function and greater freedom of breathing after intensive training in yoga nidra, pranayama and other yogic kriyas and 63% had definite relaxation and dilation of the bronchial tubes when retested on a spirometer.<sup>24</sup> The yoga nidra state has also been used by a Texas pediatrician to cure severe asthma in adolescents.<sup>25</sup>

#### **Colon diseases**

A Swedish study has reported remission of symptoms of colonic irritability following 3 weeks of relaxation training,<sup>26</sup> while severe and long standing ulcerative colitis has been cured or effectively controlled by a daily program of specific asanas, including shavasana, together with Ayurvedic treatment and dietary modification in a controlled study in the Department of Ayurvedic medicine, Banaras hindu university of India.<sup>27</sup>

### **Cancer**

Yoga nidra is specially recommended in conjunction with meditation therapy to treat cancer. At present, research studies are underway to determine the precise extent to which cancer growth can be directly influenced by yogic relaxation and meditation, either alone or in conjunction with existing forms of cancer therapy such as surgery, chemotherapy and irradiation. The work of Australian psychiatrist Dr. Ainslie Meares stands as the most convincing research evidence to date. He has demonstrated clear regression of cancer of the rectum following meditation<sup>28</sup> and the remission of metastatic cancers developing from a primary cancer in the lung.<sup>29</sup>

Significant clinical trials of yogic relaxation in cancer have also been reported by researchers in USA. For example, Dr. O. C. Simonton, a radio therapist from Texas, found in a controlled trial that a specific form of yoga nidra increased the life span of cancer patients undergoing radiotherapy.<sup>30</sup> In Simonton's adapted visualization practice, patients imagined their own white blood cells actively attacking, overcoming and destroying the cancer cells. This seemed to booster the patient's immune response, leading to clinical improvement in the condition, amounting to partial and even complete remission of symptoms and signs of disease.<sup>31</sup>

### **Cardiovascular diseases**

In the recent years, yoga nidra has emerged as an effective, preventive alleviative and curative technique in the management of degenerative and ischaemic heart disease. As an adjunct to conventional medical therapies, yoga nidra plays an important role in the cardiac impairment. Yoga nidra seems to operate via the same relaxation response as simple japa yoga, which has been found to relieve the fundamental cause of cardiac strain and heart attack by reducing the load of environmental and intrapsychic stress being relayed from the hypothalamus into the electrical conducting fibres of the heart via the sympathetic nervous system.<sup>32</sup> As a result heart rate, blood pressure and workload on the cardiovascular muscles were reduced.<sup>33</sup> Yoga nidra is emerging as an excellent preventive and curative procedure in cardiovascular management. It induces a more relaxed mental attitude and emotional climate, enabling practitioners to successfully withstand the stresses of daily life without mishap. In an important study at the University of Tel Aviv (Israel), yoga nidra significantly lowered the levels of serum cholesterol in cardiac patients.<sup>34</sup>

Other studies have reported lower circulating levels of metabolic and endocrine 'stress hormones', including lipids, lactate, aldosterone, testosterone, adrenaline and dopamine-beta-hydroxylase.<sup>35</sup> In 1948, Aaron Friedell, an American cardiologist, recorded that attentive nostril breathing (known in yoga as anuloma viloma or psychic nostril breathing) was a most effective, immediate and drug-free means of controlling and alleviating angina pain in cardiac patients.<sup>36</sup> The value of the practice of yogic relaxation in prevention of cardiovascular disease has been fairly well recognized and accepted.<sup>37</sup>

### **Hypertension**

Hypertension and its complications are a leading cause of death in modern societies. In this stress-related psychosomatic disorder, widespread damage to the heart, blood vessels, eyes, kidneys and brain may occur after the prolonged elevation of blood pressure throughout the arterial network for months or years, an increasingly high proportion of the population are today prescribed antihypertensive drug

therapy for the rest of their lives in order to prevent these complications and an early demise. The vast majority (9 out of 10) of hypertensives are diagnosed as having essential (idiopathic) hypertension for which no cause has been discovered by medical scientists. A high proportion of these patients do not suffer from any troublesome symptoms. To date, lifelong antihypertensive drug therapy has been the only effective form of management. Unfortunately, the drug regimes available are by no means ideal. They cause major side effects in many patients, who choose to discontinue therapy as a result, even at the risk of dangerous consequences and a shortened life span. In this light, the emergence of yoga nidra relaxation as a safe, effective and inexpensive treatment for mild to moderate hypertension is most encouraging both for doctors and the community at large. The effectiveness of yoga nidra in lowering the elevated blood pressure levels of hypertensive patients has been validated in numerous clinical studies.<sup>38</sup>

Yoga nidra therapy adopted either alone or as an adjunct therapy has been found to reduce systolic readings by an average of 15-20mmHg, and diastolic readings by 10mmHg after 3 weeks or more of daily guided practice.<sup>39</sup> A recent study conducted at the Stanford University School of Medicine (USA) demonstrated that the drop in blood pressure induced by daily yoga nidra practice has a far reaching effect, extending throughout the day and is not merely a transient effect coincident with the practice session.<sup>40</sup> Another controlled study which was conducted at the Langley Porter Neuropsychiatric Institute in California, found that reductions in blood pressure and anxiety levels in hypertensive patients continued for 12 months after yoga nidra training.<sup>41</sup>

### **Stress**

A survey conducted by the Australian Federal Health Department in 1980 revealed that stress is the aspect of modern life that concerned most people. It is clear that life has become so complex, hypnotizing and confusing for many people today that they find it very difficult to slow down, relax and unwind even when they get the opportunity. Constant concern with making ends meet economically coupled with tensions and frustrations of modern social, marital, family and community life, frequently transform life into a pressure cooker without a safety valve. Deprived of more traditional forms of emotional and psychosomatic release such as prayer, religious worship, sport or creative recreation, many sensitive modern men and women confront a situation of spiraling tension without escape. When the cooker explodes, mental breakdown and physical disease commonly result.<sup>1</sup>

The work of Dr. K.N. Udupa of Banaras Hindu University (India) suggests that stress-related disorders evolve gradually through four recognizable stages.<sup>42</sup> Initially, psychological changes such as anxiety, irritability and insomnia arise due to over stimulation of the sympathetic nervous system. In the second stage, distinct physical symptoms such as high blood pressure, elevated heart rate or increased intestinal motility appear. In the third stage, a more profound physical and/or biochemical imbalance sets in, and evidence of malfunctioning organs manifests clinically. Finally detectable and often irreversible lesions appear, often with severe symptoms requiring surgical or long term pharmacological management.

Yoga nidra is now prescribed by doctors in many countries both as a preventive and curative therapy in the first three

stages of stress-related disease. In addition, it is also a most effective adjunct in the management of psychosomatic disorders that have progressed to a severe or structurally irreversible stage. Here yoga nidra provides effective symptomatic relief, alleviates depression and long standing anxiety. <sup>1</sup>The deficiencies of the modern technological lifestyle are being recognized by many sensitive people, including doctors, who are now seeking an efficient, scientific way of attaining deep, systematic relaxation. Yoga nidra, which is subjectively oriented and internally directed, comes as a great boon to them, providing both a calming retreat and an effective coping device. Many tense, alienated and frustrated people report that by modifying their lifestyle to include daily yoga nidra, they have totally transformed their outlook, and greatly enhanced their appreciation and experience of life. <sup>1</sup>

### **Mechanism of Yoganidra**

The precise mechanism by which yoga nidra acts centrally upon the brain to induce relaxation throughout the nervous system and to booster the resistance levels of the physiological systems has become an important area of research. Various research groups have defined this relaxed state of awareness in different terms including the hypnagogic state, the creative surrender and the relaxation response. Each is referring to the same process of yoga nidra- a state of profound psycho-physiological relaxation and metabolic rest in which a fundamental release and readjustment in the controlling mechanisms of the autonomic nervous system appear to occur. Many of the physiological parameters of this experience have now been identified in scientific experiments. They included altered frequency of the brain's electrical rhythms, decreased heart rate and systolic and diastolic blood pressures, altered levels of circulating 'stress hormones' including adrenaline and cortisol from the adrenal glands and decreased sympathetic nervous activity as reflected in increased galvanic skin resistance (GSR). <sup>1</sup>

### **CONCLUSIONS**

People feel that they get relaxed when they collapse in an easy chair either with a cup of coffee, a drink or a cigarette, reading a newspaper or switching on to a television. But this will never suffice as a scientific definition of relaxation. These are only sensory diversions. True relaxation is actually an experience far beyond all this. For absolute relaxation, one must undergo yoganidra, the state of dynamic sleep. The ultimate objective of yoga nidra goes far beyond merely combating stressful influences and rectifying the imbalances created by poor stress management. Yoga nidra apart from an important tool in stress management also has showed significant results in various psychosomatic diseases and opens up a new avenue for the holistic management of the ailments.

### **REFERENCES**

1. Swami satyananda saraswati. Yoga nidra. Yoga Publication Trust Munger; Bihar, India:2001
2. Swami.S.S, Hatha Yoga Pradipika. Yoga Publication Trust, Munger, Bihar; India: 1998.
3. Srinivasayogi. Hatarathnavali(A Treatise on Hathayoga).Lonavala Yoga Institute;India:2009.
4. Carrington P, Collings G, Benson H etal. The use of meditation-relaxation techniques for the management of stress in a working population. *J. Occup.Med*; 22(4):221-231, 1980.
5. Klotz M. Functional relaxation as a method of anthropological medicine.*Zeitschrift Klin. Psychol. Psychother*; 26(1):67-80.

6. Girodo J. Yoga meditation and flooding in the treatment of anxiety neurosis. *J.Behav.ther and Exp. Psychiat*. 5(2); 157-160.
7. Baither RC and Godsey R. Rational emotive education and relaxation training in large group treatment of test anxiety. *Psychol. Rep.* 45(1):326.
8. Bahrke MS. Exercise, meditation and anxiety reduction: a review. *Amer.Corr.Ther.J.* March-April 1979.
9. Dunn F M. Relaxation training and its relationship to hyperactivity in boys. *Diss. Abstr.Int.* 41(1); July 1980.
10. Fairburn CG, Fairburn SM. Relaxation training in psychiatric admission units. *Occup.Ther*; 280-282, 1979.
11. Horton PC. The mystical experience as a suicide preventive. *Amer. J.Psychiat*; 130:294-296.
12. Shealy RC.The effectiveness of various treatment techniques in different degrees and durations of sleep-onset insomnia. *Behav.Res and Ther*; 17(6):541-546.
13. Hypner GC. Relaxation treatment for excessive cigarette and caffeine use. *Psychol. Rep*; 45:531-534, 1979.
14. French AP, Tupin JP. Therapeutic application of a simple relaxation method. *Amer.J.Psychother*; 28:282-287, 1974.
15. Tung A, DeGood D, Tenicela R. Clinical evaluation of biofeedback relaxation training. *Pennsylvania Med*; 82(1):18-19, Jan.1979.
16. Sargent JD, Green EE, Walters EE. Preliminary report in a pilot study of migraine and tension headaches . *Psychosom. Med*; 35:129-135, 1973.
17. Silver BV et al. Temperature biofeedback and relaxation training in treatment of migraine headaches. *Biofeedback and Self regulation*; 4(4):359-366, Dec-1979.
18. Varni JW. Self - regulation techniques in the management of chronic arthritic pain in haemophilia. *Behav.Ther*; 12(2):185-194, March, 1981.
19. Leboyer F. Birth without violence, Rigby Ltd, Australia, 1977.
20. Ferguson JH. The effects of relaxation training on menstrual pain and locus of control in a selected group of women. *Diss.Abstr.Int.*41 (10), April, 1981.
21. Fortini K, Apro N, Bugnon et al. Relaxation study in a geriatric hospital. *Rundschau Med. Praxis*; 69:428-433, 1980.
22. Hock RA et al. Medical-psychological interventions in male asthmatic children- an evaluation of physiological change. *Psychosom.Med.* 40(3):210-215.
23. Erskine-Milliss J, Schonell M. Relaxation therapy in asthma- a critical review. *Psychosom Med*; 43(4): Aug, 1981.
24. Gupta GB, Sepaha GC et al. The effects of yoga on bronchial sthma. *Yoga (Bihar school of Yoga)*;27(2):29-33.Feb,1979.
25. Zelter L. Report of University Texas Health Science Centre, 1980.
26. Jansson L. Behavioural treatment of irritable colon. *Scand.J.Behav.Ther*; 8(4):119-204, 1979.
27. Deshpande PJ, Sharma SK and Shattiwar M. Yogic and Ayurvedic treatment of chronic colitis. *Yoga (Bihar school of Yoga)*; 19(6): June, 1981.
28. MearesA.Regression of cancer of the rectum after intensive meditation. *Med.J.Aust*;2(10):539,1979.
29. Meares A. Remission of massive metastases from undifferentiated carcinoma of the lung associated with intensive meditation. *J.Amer.Soc.Psychosom.Dent and Med*; 27(2):40-41, 1980.
30. Simonton OC. The role of the mind in the cancer therapy, transcript from the dimensions of healing- A symposium, Academy of Parapsychology and Medicine (Stanford University), 1972.
31. Scarf M. Images that heal; A doubtful idea whose time has come. *Psychol. Today (USA)*; Sept, 1980.
32. Orme-Johnson DW. Autonomic stability and transcendental meditation. *Psychosom Med*; 35:341-349.
33. Puente A and Beiman I. The effects of behavior therapy, self relaxation and transcendental meditation on cardiovascular stress response. *J.Clin.Psychol*; 36(10):291-293.
34. Cooper MJ and Aygen MM. A relaxation technique in the management of hyper cholesterolemia. *J.Hum.Stress*;pp 24-27.Dec,1979.
35. Stone RA and De Leo. J. Psychotherapeutic control of hypertension. *N.Engl.J.Med*; 294:80-84.
36. Freidell A. Automative attentive breathing in angina pectoris. *Minnesota Med*; pp.875-881, Aug, 1948.
37. Nesor K. Prevention of cardiovascular diseases from a psychosomatic point of view. *Cas. Lek. Ces*; 120(35):1055-1058, reprinted in *Yoga (Bihar school of Yoga)*; Aug, 1981.
38. Datey KK, Deshmukh et al. Shavasana- a yogic exercise in the management of hypertension.*Angiology*; 20:325-333.

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39. Brauer AP et al. Relaxation therapy for essential hypertension: Veteran's Administration outpatients study. *J.Behav.Med*;2(1),1979.
40. AgrasWS. Relaxation training: twenty four hours blood pressure reduction. *Arch.Gen.Psychiat*; 37:859-863.
41. Lekh Raj Bali. Long term effect of relaxation on blood pressure and anxiety levels of essential hypertensive males:a controlled study. *Psychosom.Med*; 41(8), Dec.1979.
42. Udupa KN. Pathogenesis and management of stress disorders. *Quart. J.Surg.Sci. Banaras Hindu University*; 13(2):56, June, 1977.