

ROLE OF YOGA-NIDRA IN STRESS-INDUCED HYPERTENSION – A CASE STUDY

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<https://doi.org/10.46607/iamj5513042025>

(Published Online: April 2025)

Open Access

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Article Received: 08/02/2025 - Peer Reviewed: 29/03/2025 - Accepted for Publication: 11/04/2025.

**ABSTRACT**

Hypertension is the most common cardiovascular disease, affecting more than one billion people throughout the world. The lifetime risk of developing hypertension is approximately 90% for middle-aged and older (55 years and above) men and women. It is a major contributor to stroke and ischemic heart disease. Essential hypertension is a chronic elevation in arterial blood pressure (BP) > 140/90 mmHg with no definable causes. Stress is an inevitable part of life. No matter how much we try to avoid it, it will eventually affect us. Stress can be caused by various factors such as work pressure, relationship issues, financial troubles, or health problems. Stress can lead to serious physical and mental health problems like hypertension if left unmanaged.

The practice of *Yoga-Nidra* results in a hypothalamic reaction, stimulating the parasympathetic nervous system and suppressing the function of the sympathetic nervous system. *According to this theory, yoga-nidra practice brings a profoundly relaxed state of body and mind, though conscious minds are clearly alert to understand what they feel. Yoga-Nidra also induces nerve relaxation and tranquility* and reduces deep-rooted unconscious mental tension.

A patient suffering from stress-induced hypertension was selected from the OPD of the PG Department of Swasthavritta & Yoga, R.D. Memorial Ayu. P.G. College & Hospital Bhopal was treated with *daily Yoga-Nidra Abhyasa*. No major complication was reported by the patient in a follow-up period of one month. The patient was assessed on the parameters as per grading, and it was seen that the patient was much relieved from the disease regarding signs and symptoms. Hence, the benefits of *Yoga-Nidra*, compared to other intervention

methods, include affordability, non-invasiveness, protection, and accessibility. In this light, the advent of safe, efficient, and inexpensive treatment for mild to moderate hypertension with *Yoga-Nidra* relaxation is most promising for doctors and the community.

Keywords: *Yoga-Nidra, stress-induced hypertension, sympathetic and parasympathetic nervous system*

INTRODUCTION

- Hypertension is the most common cardiovascular as well as lifestyle-related disorder affecting more than one billion people throughout the world. The lifetime risk of developing hypertension is approximately 90% for middle-aged and older (55 years and above) men and women. It is a major contributor to stroke and ischemic heart disease.
- Essential hypertension is a chronic elevation in arterial blood pressure (BP) > 140/90 mmHg with no definable causes. The genetic and environmental factors mentioned earlier interact with each other and influence the pathogenesis of this condition. Stress is an inevitable part of life. No matter how much we try to avoid it, it will eventually affect us. Stress can be caused by various factors such as work pressure, relationship issues, financial troubles, or health problems. Stress can lead to serious physical and mental health problems like hypertension if left unmanaged.
- There is a great need for alternative, less costly approaches to reduce blood pressure that have a reduced probability of medication reactions and can convey long-term adherence advantages. Yoga is one such alternative method in healthcare that is thought to boost blood pressure regulation. There is no single concept of yoga practice that is widely recognised. However, it is typically defined as an ancient tradition that includes postures, breath control, meditation, and unique ethical practices. Blood pressure management is among the published on the possible benefits of yoga for lowering blood pressure and other risk factors for cardiovascular disease. Yoga-Nidra is probably the best-known technique to

induce complete physical, mental, and emotional relaxation.

- Studies have stated that the practice of Yoga-Nidra results in a hypothalamic reaction, stimulating the parasympathetic nervous system and suppressing the function of the sympathetic nervous system. Yoga-Nidra practice brings a profoundly relaxed state of body and mind based on this theory, though conscious minds are alert to understand what they feel. Yoga-Nidra also induces nerve relaxation and tranquility and reduces deep-rooted unconscious mental tension. The theoretical basis for the calming effect of yoga-Nidra, taken into account, is that it usually stimulates the parasympathetic nervous system to relieve mental and psychological symptoms. Compared to other intervention methods, additional benefits of yoga-Nidra include affordability, non-invasiveness, protection, and accessibility. In this light, the advent of a safe, efficient, and inexpensive treatment for mild to moderate hypertension with Yoga-Nidra relaxation is most promising for doctors and the community. Numerous clinical trials have validated the efficacy of Yoga-Nidra in lowering the elevated blood pressure levels of hypertensive patients. In some nations, the procedure is now commonly prescribed by physicians.

Personal Information:-

- Age-27
- Sex- Male
- Marital status- Unmarried
- Diet- Mixed
- Addiction- No addiction
- Occupation- Student
- Address - Neelbad Bhopal
- Reg.no- 2405674

Vedana Vruttanta:-

- A 27-year-old male patient came to RD Memorial Ayu. Hospital in Swasthavritta OPD with the complaints of Shirah Shula, Vibandha, & gatra Vivarnata, especially on the face, for the last 3 months. After doing an examination, he was found as a pt. of hypertension (mainly induced by stress). He was diagnosed as a pt. of Raktagata Vata (stress-induced hypertension) & advised for Yoga- Nidra Abhyasa for a limited time.

Poorva Vyadhi Vruttanta:-

- Pt. had H/O HTN but off & On (in Stress condition only).
- No H/O- DM, TB, Asthma or other Illness.
- No H/O smoking, tobacco chewing or any other personal habit.

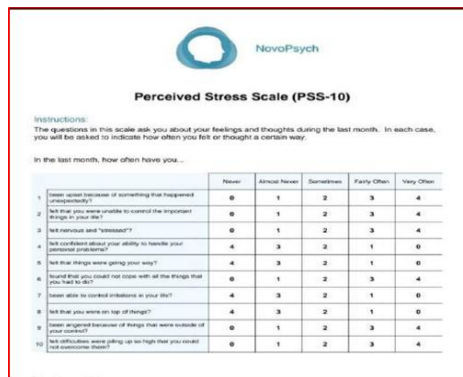
Poorva Chikitsa Vruttanta: –

- Pt. took allopathic medicine SOS for the above complaints but didn't get much relief.

Systemic Examination:-

- R/S: The shape of the chest is bilaterally symmetrical, the trachea is centrally placed, the respiratory rate is 24/min, and no wheezing/ Ronchi sound is heard.
- P/A:- Soft, Umbilicus centrally placed, mild abdominal distention, Palpable liver, No tenderness, On auscultation – Vowel sound heard, No scar marks.
- C.V.S: S1 S2 was heard, and no murmurs or added sound was heard.
- C.N.S :- Pt. was conscious & oriented to time, place and Person. All cranial nerves were Intact; no hallucination and delusion were observed.

Pradhana Vedana:-	No.	Blood pressure	Score	Grading
• Shirashoola – Since 3 months	1.	Diastolic	0	85 > Normal
• Vibandha – Since 3 months		B.P. (mm Hg)	1	85-89 High-Normal
• Gatra Vivarnata– Since 3 months			2	90-99 Stage



Samprapti Ghatak:-

- Dosh- Vata Pitta

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Name: **SHERENDRA CHOUSA** O.P.D. No: **2405674**
Age: **27** Sex: **Male**
Date: **01/02/2024** Mobile No: **9853089062**
Address: **NILURAD**
Department: **SWASHAVRITTA** Doctor: **Dr. Manish Tiwari**

Vitals: **Chall Complaints - Shiveran shude, sthalya, vibandho**
Temp: **37.5**
Pulse: **78** Min
BP: **110/70** mmHg
Diagnosis: **A Raktaged vata**
Treatment: **Ry**
1) - 100% yoga nidra - 1x2
2) - 100% diet - 1x2
3) - 100% shodhan - 1x2
4) - 100% shanti - 1x2
5) - 100% shanti - 1x2
6) - 100% shanti - 1x2
7) - 100% shanti - 1x2
8) - 100% shanti - 1x2
9) - 100% shanti - 1x2
10) - 100% shanti - 1x2
Investigations Advised: **1) - 100% shanti - 1x2**
2) - 100% shanti - 1x2
3) - 100% shanti - 1x2
4) - 100% shanti - 1x2
5) - 100% shanti - 1x2
6) - 100% shanti - 1x2
7) - 100% shanti - 1x2
8) - 100% shanti - 1x2
9) - 100% shanti - 1x2
10) - 100% shanti - 1x2
Yoga procc → **100% shanti - 1x2**
11) - 100% shanti - 1x2
12) - 100% shanti - 1x2
13) - 100% shanti - 1x2
14) - 100% shanti - 1x2
15) - 100% shanti - 1x2
16) - 100% shanti - 1x2
17) - 100% shanti - 1x2
18) - 100% shanti - 1x2
19) - 100% shanti - 1x2
20) - 100% shanti - 1x2

- Regular Yog-Nidra abayas Yog-Nidra abayas were done properly for 30 minutes per day for 21 days.

Yoga- Nidra Abhyasa Vidhi:

The method of the Yog-Nidra was divided into three steps:-

- Poorva Karma
- Pradhana Karma
- Pashchat Karma
- Poorva Karma:-
- It included the preparation of Yog- Nidra. Pt. was in comfortable and loose clothes. Yoga Nidra was done in a peaceful, lighted, and well-ventilated place. i.e. Yoga Kaksh of Swasthavritta dept. Of R.D. Memorial Ayu. College & Hospital Bhopal.
- Pradhana karma:-
- It included the main procedure of Yog-Nidra. This procedure lasted for about 30 min.

Pashchat Karma:-

- Paschat karma is a part of Pancha karma and is known as the concluding phase or the follow-up treatments. This therapy is helpful in re-establishing digestive enzymes and replenishing the detoxified tissues of the body. In Paschat karma, we suggest a diet plan for patients.

- Dushya- Rakta dhatu
- Sama/Niram- Sama
- Adhithana- mastishka, hridaya Pradesha
- Srotasa- Rasavaha, Raktavaha srotas
- Srotodushti- Vimargagamana
- Agni-Manda
- Vyadhi swabhava – Chirakari
- Sadhya Asadhyata- sadhya

Vyadhi Vinishchaya/ Diagnosis:-

- Raktagata Vata (Stress induced Hypertension)

Chikitsa Vruttanta/ Treatment given

Yoga - Yognidra procedure

Date	Before Yognidra	After Yog nidra
29/1/23	100/80 mmHg	120/70 mmHg
30/1/23	110/90 mmHg	110/70 mmHg
31/1/23	140/90 mmHg	120/80 mmHg
01/2/23	130/90 mmHg	110/70 mmHg
02/2/23	130/90 mmHg	120/80 mmHg
03/2/23	130/80 mmHg	110/70 mmHg
13/2/23	130/80 mmHg	110/70 mmHg

Method of doing Yoga- Nidra:-

Firstly, lie down in the *Shavasana* position (Corpse Pose). This pose helps relax the body, quiet the mind, and reduce stress and anxiety.

Close your eyes and take a few deep breaths. As you breathe in, say to yourself, “I am breathing in peace.” As you breathe, say to yourself, “I am breathing out stress.”

Continue to breathe deeply and relax your body. Focus on your breath and allow your body to become heavy and relaxed. If you find your mind wandering, gently bring your

attention back to your breath. There is no need to judge your thoughts or to try to control them. Observe them and let them go. Continue to practice Yoga Nidra for 30 minutes.

CONCLUSION

The above case study demonstrated that Yoga-Nidra Abhyasa is a Procedure of choice in the management of Raktagata Vata, i.e., stress-induced hypertension, as mentioned in the classical texts of Yoga, Ayurvedic classics, and others. However, further clinical and experimental studies on a larger sample size of patients are needed to develop and establish the Ayurvedic treatment protocol for the management of stress-induced hypertension.

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Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Sadhana Aherwar et al: Role of yoga-nidra in stress-induced hypertension – a case study. International Ayurvedic Medical Journal {online} 2025 {cited April 2025}