

Yogic Techniques and Lifestyle Modifications to Manage Hypertension

Dr. Saroj Kumar Sahu

Introduction

Hypertension is the term used to describe high blood pressure. Blood pressure is a measurement of the force against the walls of your arteries as the heart pumps blood through the body. Blood pressure readings are measured in millimeters of mercury (mmHg) and usually given as two numbers — for example, 120 over 80 (written as 120/80 mmHg). One or both of these numbers can be too high. The top number is your systolic pressure and the bottom number is your diastolic pressure.

Blood Pressure	Systolic pressure	Diastolic pressure
	<u>mmHg</u>	<u>mmHg</u>
Normal	90–119	60–79
Prehypertension	120–139	80–89
Stage 1	140–159	90–99
Stage 2	≥160	≥100
<u>Isolated hypertension</u>	≥140	< 90

Blood pressure is usually classified based on the systolic and diastolic blood pressures. Systolic blood pressure is the blood pressure in

vessels during a heart beat. Diastolic blood pressure is the pressure between heart-beats.

Types of Hypertension

Two forms of high blood pressure have been described:

A. Essential/primary/idiopathic hypertension

Most of the time, no cause is identified. This is called essential hypertension.

B. Secondary hypertension.

High blood pressure that is caused by another medical condition or medication is called secondary hypertension.

Causes of secondary hypertension are:

- Alcohol
- Pregnancy
- renal disease
- endocrine disease
- drugs such as oc pills, anabolic steroids, cortico steroids, NSAID.

Risk factors for hypertension

Risk factors for hypertension include:

- age over 60 years
- male sex
- race
- heredity(a family history of high blood pressure)
- salt sensitivity
- obesity
- inactive lifestyle
- heavy alcohol consumption
- use of oral contraceptives
- stress or anxiousness
- diabetes
- Smoking

Symptoms of hypertension

Most of the time, there are no symptoms. Uncomplicated (essential) high blood pressure usually occurs without any symptoms and so hypertension has been labeled “the silent killer”. It is called this because the disease can progress to finally develop any several potentially fatal complications such as heart attacks or strokes.

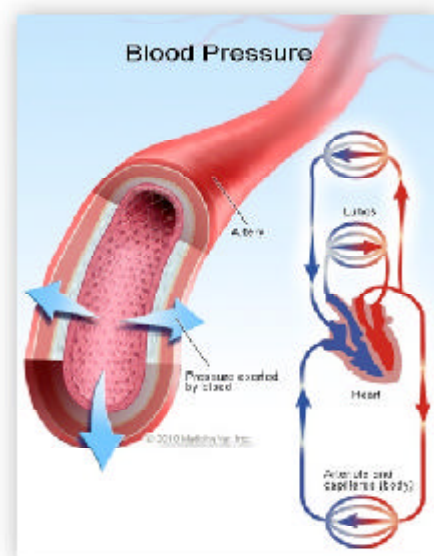
Uncomplicated hypertension may be present and may remain unnoticed for many years. This happens when there are no symptoms and blood pressure screening. Some people with uncomplicated hypertension, however may, experience symptoms such as:

1. headaches
2. dizziness (a sensation of unsteadiness and a feeling of movement within the head; lightheadness; disequilibrium)
3. shortness of breath

4. blurred vision
5. nervousness
6. irritability
7. insomnia or wakefulness
8. head reeling
9. palpitation (a subjective sensation of an unduly rapid or irregular heart beat)
10. nervous tension and fatigue
11. emotional upset
12. tiredness
13. pain in chest
14. frequent urination
15. aches (continuous fixed pain) and pains in the arms, shoulder region, leg, back etc.
16. pain towards the back of head and neck on walking in the morning.

Treatment of Hypertension

Blood pressure persistently 140/90 mm of Hg is usually treated with life style modifications and medication(antihypertensive drugs).



Lifestyle modifications to manage hypertension.

Modification	Recommendation	Approximate Systolic BP Reduction, Range
Weight reduction	Maintain normal body weight (BMI, 18.5–24.9)	5–20 mm Hg/10-kg weight loss.
Adopt DASH (Dietary Approaches to Stop Hypertension) eating plan	Consume a diet rich in fruits, vegetables, and low-fat dairy products with a reduced content of saturated fat and total fat.	8–14 mm Hg
Dietary sodium reduction	Reduce dietary sodium intake to no more than 100 mEq/L (2.4 g sodium or 6 g sodium chloride).	2–8 mm Hg
Physical activity	Engage in regular aerobic physical activity such as brisk walking (at least 30 minutes per day, most days of the week).	4–9 mm Hg
Moderation of alcohol consumption	Limit consumption to no more than two drinks per day in most men and no more than one drink per day in women and lighter-weight persons.	2–4 mm Hg

Yogic techniques for management of hypertension

Asanas- Pawanmuktasana part 1, ananda madirasana, siddhasana, shavasana, vajrasana, shashankasana, padmasana, suryanamaskara, all relaxation poses.

Pranayama -Nadi shodhana stages 1 and 2, sheetali, sheetkari, ujjayi, bhramari.

Mudra- Nasagra mudra

Relaxation practices- Yoga nidra

Meditation practices

Ajapa japa, kundalini kriyas (part of the practices of kriya yoga), Nada sanchalana

(conducting the sound consciousness), Pawan sanchalana (conducting the breath consciousness), Sabda sanchalana (conducting the word consciousness).

Conclusion

Hypertension is a dangerous disease with no known cure. Despite its complexity and widespread effects, many people believe that simple, ancient practice of yoga is an effective tool in combating this silent killer disease.

Dr. Saroj Kumar Sahu, Ph.D Scholar (Yoga), Dept. of Yogic Science, Vani Vihar, Utkal University, Bhubaneswar, AYUSH Medical Officer, NRHM, Odisha