

Role of Yoga in Hypertension

Dr. Ruchika

PG scholar, Department of Swasthivritta & Yoga
Sriganganagar college of Ayurvedic Science & Hospital
Sriganganagar, Rajasthan, India

Dr. Sangeeta

PG Scholar, Department of Swasthivritta and yoga
Sriganganagar College of Ayurvedic science & hospital
Sriganganagar, Rajasthan, India

Dr. Sunayna Sharma

Associate Professor
Sriganganagar college of Ayurvedic Science & Hospital
Sriganganagar, Rajasthan, India

Introduction:-

Lifestyle disorder.

Lifestyle diseases are defined as disease linked with the way people live their life. These are non-communicable disease. This is commonly caused by lack of physical activity, unhealthy eating, alcohol, drugs and smoking.

High B.P accounts for the 2nd largest no. of preventable heart disease. It is known as silent killer because often there are no symptoms despite its role in significantly increasing the risk of heart disease. It is common disorder affecting 15% of adult population in india. It is leading risk factor for mortality & ranked 3rd as a cause of disability adjusted life years. Hypertension is a major public health issue worldwide, because of its high prevalence and concomitant increase in risk of disease. It is more prevalent in urban than rural areas. The reason could be the difference in heredity, smoking, body fat, lifestyle city dwellers & villagers. The actual cause of this disorder is unidentified which is the reason why it is called primary hypertension or essential hypertension. The other type is called secondary hypertension in which the cause may be renal, endocrine, neurological or mechanical. Modern medicines can treat hypertension but in long run they have sideeffects and also it is not controlled with drug therapy in large no. of people. Stress is one of the predisposing factors for hypertension. Yoga is one such alternative healthcare practice thought to improve blood pressure control. There is no single definition of the

practice of yoga, that is universally accepted although it is generally described as an ancient tradition that incorporates postures, breath control, meditation as well as specific ethical practices. Yoga promotes the flexibility of the arteries & reduces the rigidity of arteries & also promotes the free flow of blood from arteries thus resulting in control of hypertension. Yoga reduces the cortisol levels there by stress is reduced. Meditation & relaxation techniques offers a reduction in the diastolic & systolic blood pressure during mental stress.

Hypertension:-

A condition in which the force of blood against the artery wall is too high. It is a common condition in which the long term force of the blood against your artery wall is high enough that it may eventually cause health problems such as heart disease. BP is determined both by the amount of blood your heart pumps and the amount of resistance to blood flow in your arteries, the more the blood your heart pumps and the narrower your arteries, the higher your BP.

Blood pressure is expressed as 2 numbers. The top represents the pressure when your heart contracts :-SYSTOLIC PRESSURE, the bottom represents the pressure when your heart rests between the beats:- the DIASTOLIC PRESSURE.

Blood Pressure :- Systolic Pressure / Diastolic Pressure

Uncontrolled high blood pressure increases your risk of serious health problems including heart attack and stroke. Usually hypertension is defined BP above 140/90mmhg and is considered severe if the pressure is above 180/120mmhg.

Stages Of Hypertension:-

There are 4 stages

Normal:- less than 120/80mmhg

Elevated:- between 120-129 /80mmhg

Stage 1:- between 130-139 / 80-89 mmhg

Stage 2 :- above 140/90mmhg

Hypertensive emergency :- More than 180mmhg / 120

The new guidelines stressed the importance of using proper technique to measure blood pressure. BP level should be based on an average of 2-3 readings on atleast two different locations.

Warnings of Hypertensive Emergency

- Severe Headache
- Nose Bleeding
- Fatigue or Confusion
- Vision problem
- Difficulty in breathing
- Chest pain
- Irregular heart beat
- Blood in urine

Many cases of high blood pressure are asymptomatic.

Causes of High Blood Pressure

- Smoking
- Obesity or being overweight
- Diabetes
- Having sedentary lifestyle
- Lack of physical activity
- High salt and alcohol intake levels
- Chronic kidney disease
- Stress
- High level of cholesterol and fat in your blood
- Certain chronic conditions like diabetes and sleep apnea.

Risk Factors

- **AGE:-** the risk of hypertension increases as your age increases.
- **Race :-** common among African, Americans
- **Genetics :-** hypertension tends to run in families.
- **Being overweight or obese :-** the more you weight, the more blood you need to supply oxygen and nutrients to your tissues. As the volume of blood circulated through your

blood vessels increases, so does the pressure on your artery walls.

Introduction Of Yoga

YOGA is an ancient method to stay fit which can give you solution to many health problems.

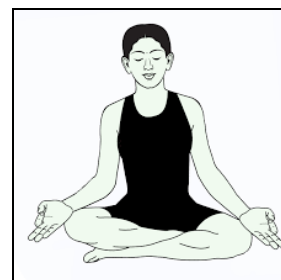
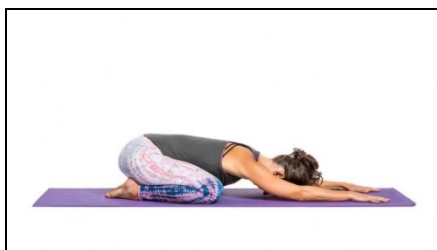
Yoga is a physical, spiritual and mental discipline. It combines gentle movements with controlled focus breathing and meditation. It incorporates posture, breath control and meditation as well as specific ethical practices. It will enhance the functioning of your heart. It leaves a positive impact on your mind and body. It is an integrated system of self culture, which aims at harmonious development of body and mind and covers all aspects of human life that lead to physical well being, mental harmony culminating into positive thinking, happiness and peace. There are many types of yoga, hath yoga is most commonly practiced. Core component of hath yoga include- stretching exercise, physical postures (asans), breath control (pranayam) and concentration (meditation). Yoga is believed to help detoxify the body, mitigate chronic fatigue, enhance endurance and improve organ and immune functions. Beneficial effect of yoga have been reported in multiple chronic conditions including – depression, stress, anxiety, menopausal symptoms, arthritis, low back pain, cancer, allergies, asthma, IBS, CVD etc.

Role of Yoga Poses For High Blood Pressure

- Yoga asans involve breathing consciously and deeply while synchronizing your body movements. They can help control pressure naturally, by relieving stress.
- It can soothe the nerves and help slow down an abnormal heart rate.
- Yoga helps in increasing immunity and reducing incidences of heart problems like heart attacks and strokes.
- Yoga helps regularize sleep habits and patterns.
- Obesity can also lead to hypertension. Regular practice of yoga and an improved diet regulates body weight.
- Yoga gives positive energy to the body and mind. It makes you happier and more hopeful in life.

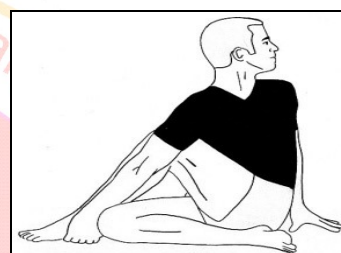
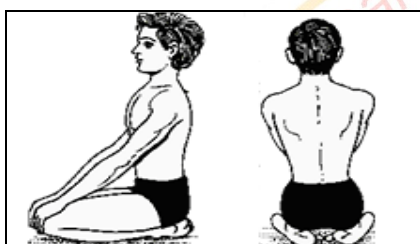
Yoga Poses

- **SHISHUASANA** :- Child pose
Relieves stress and fatigue.

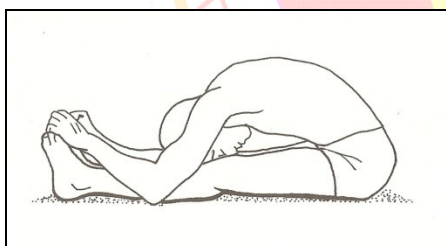


- **ARDHA MATSYENDRASANA** :- sitting half spinal twist
Stimulate the heart and nervous system.

- **VAJRASANA** :- Diamond pose
It increases blood flow to the lower abdomen.



- **PASCHIMOTTANASANA** : Standing forward bend pose
It is beneficial for your nervous system and will calm you down.



- **BADHAKONASANA** :- Butterfly pose
Stimulates the heart and leads to better circulation of blood all over the body.



- **VIPARITA KARANI** :- Legs-up-the-wall pose
It will improve blood circulation.



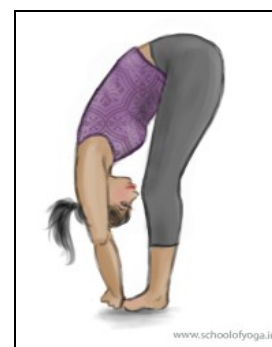
Legs-up-the-wall Pose

Poses To Avoid With High Blood Pressure

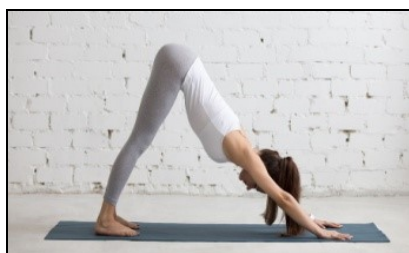
During practice of these poses, head is at lower level than your heart which can lead to sudden and uncontrolled rush of blood to head.

- **SUKHASANA** :- Easy pose
Balance body and mind.

- **PADHASTASAN**



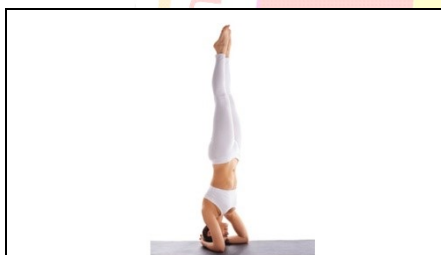
ADHOMUKH SHVASNA



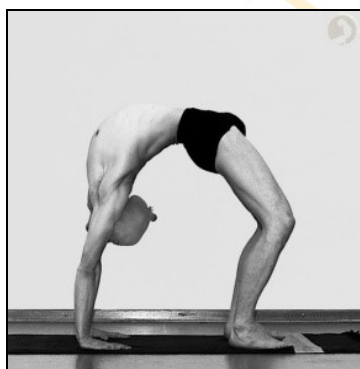
SARVANGASAN



SHIRSHASAN



URDHVADHANURASAN



which is the condition, the pressure of the blood vessel walls is high. It increases the work load of the heart & it leads to hardening of the arteries, rupture of vessels walls & ailments of heart. Yoga reduces the Blood pressure by effective & non invasive way. It will achieve a balance between mind, body and soul and also improves the enrgy levels of the body.

Conclusion :-

Hypertension is widely prevalent throughout the world and is an important risk factor for stroke, coronary heart disease, heart and renal failure. Yoga appears to be cost -effective alternative for controlling blood pressure. It reduce the feeling of stress and increase a sense of well being, reducing activation of sympathetic system and positively altering the neuroendocrine status and inflammatory response. Yoga directly stimulates the vagus nerve and parasympathetic activity.

References

1. Chaudhary AK, Bhatnagar HN,Bhatnagar LK,etal. Comprative study of the effect of drugs and relaxation in hypertension. J Assoc Physicians India. 1983;36(12):721-723. [Pubmed]
2. Patel C, North WR. Randomised controlled trial of yoga and bio-feedback in management of hypertension. Lancet 1975;(7925):93-95. [pubmed]
3. The 2007 Canadian Hypertension Education Program recommendations: the scientific summary- an annual update. Can J Cardiol 2007;23(7):521-527 [Pubmed]
4. Iyengar B.Light on yoga; Yoga Dipika. New York, NY: Schoken Books; 1966 [google scholar]
5. Steinberg L.Yoga. In:Bright M,ed Holistic Health and Healing. Philadelphia, PA:FA. Davis company; 2002:285-304. [Google Scholar]

Discussion

Stress is the major reason for hypertension & modern lifestyle, sedentary life, poor diet can also induce hypertension.Hypertension is also called silent killer because it does not show any symptoms & signs in earlier stage.Hypertension leads to heartattack, stroke & other cardiovascular events,