

# For good health, go with the (blood) flow

Column by Dr. Vivek Murari

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The human body has its own traffic issues: Our main arteries and other veins need to keep blood flowing or we get in a world of trouble.

For effective circulation, blood flows — under pressure — through the arteries (blood vessels) to various organs. It's like catsup or toothpaste: Unless you apply pressure, it won't move in the tube.

Our hearts do the job of applying pressure. With every heartbeat, the pressure rises as blood is propelled into the arteries. That pressure is called the systolic pressure. The pressure in the arteries between heartbeats is the diastolic pressure.

Those are the two readings that make up our blood pressure. And hypertension is the name for the condition when our blood pressure is out of whack.

The Joint National Committee on prevention, detection, evaluation and treatment of hypertension considers blood pressure below 120/80 to be normal, between 121-139/80-89 as prehypertension, and above 140/80 hypertension.

According to the American Heart Association, one third of all adults in the US have hypertension.

Why is this alarming. Because hypertension leads to stiffening and thickening of the arteries, and that leads to atherosclerosis, strokes, heart disease and kidney disease.

The World Health Organization (WHO) reports that approximately 60 percent of strokes and heart disease can be attributed to suboptimal blood pressure levels. That's more than half of those serious problems, originating in the pressure that pumps our blood to the brain, organs and muscle tissue.

Most patients with hypertension don't show any real signs — they are “asymptomatic.” Almost a third of them don't know they have the condition.

No wonder hypertension is considered the silent killer.

The exact cause of hypertension is unknown in the majority of patients — but smoking, alcohol use, excessive salt in the diet, sedentary lifestyle, obesity, old age and family history may contribute.

Hypertension can be diagnosed easily by measuring the blood pressure with a monitor at the doctor's office, a pharmacy or at home. Once you see those indicators, your physician will

conduct a thorough physical examination and order laboratory tests to determine a cause for your hypertension.

The tests will also screen for associated diseases like high cholesterol, diabetes, kidney disease and cardiovascular disease. The doctor may order further tests like ECG, echocardiography (ultrasound of the heart).

As many as 20 percent of patients have “white coat” hypertension. This occurs when a patient’s blood pressure in the doctor’s office is high but normal at home. Asking the patient to wear a blood pressure monitor that goes with them through their an ordinary day will record his or her actual blood pressure away from the doctor’s office and easily diagnose the condition.

The aim of treating hypertension is to reduce the risk of cardiovascular disease.

In addition, your doctor may target other diseases like obesity, diabetes and high cholesterol for treatment to reduce your risk further.

Fortunately, lifestyle changes, including regular exercise, attention to diet, reduced salt intake, increased consumption of fruit and vegetables, stopping smoking, cutting back on alcohol and losing weight can treat these diseases.

Your doctor also may prescribe medications like diuretics (water pills), ACE inhibitors, beta blockers and calcium channel blockers to reduce the blood pressure.

Other drugs like aspirin or cholesterol-lowering medications may also be prescribed to lower the risk of cardiovascular disease though they do not treat hypertension.

A number of these medications are generic, cheap and have minimal side effects.

Hypertension can be controlled — but usually it cannot be cured. So it’s important to stick with treatment instructions through the rest of your life.

According to the National Health and Nutrition Survey, 59 percent of patients with hypertension received treatment in 2000, with 34 percent getting the condition under control. This shows that the majority of patients are not making good progress and we’ve got lots of room for improvement.

What are you waiting for? If you have not had your blood pressure checked, please approach a physician. If you have hypertension, please check with your doctor about setting a goal and how you can reach it.

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