

Hypertension/High Blood Pressure Health Center



High Blood Pressure and Hypertensive Heart Disease

Hypertensive heart disease is the No. 1 cause of death associated with high blood pressure. It refers to a group of disorders that includes heart failure, ischemic heart disease, hypertensive heart disease, and left ventricular hypertrophy (excessive thickening of the heart muscle).

What Is Heart Failure?

Heart failure does not mean the heart has stopped working. Rather, it means that the heart's pumping power is weaker than normal or the heart has become less elastic. With heart failure, blood moves through the heart's pumping chambers less effectively, and pressure in the heart increases, robbing your body of oxygen and nutrients.

To compensate for reduced pumping power, the heart's chambers respond by stretching to hold more blood. This keeps the blood moving, but over time, the heart muscle walls weaken and are unable to pump as strongly. As a result, the kidneys often respond by causing the body to retain fluid (water) and sodium. The resulting fluid buildup in the arms, legs, ankles, feet, lungs, or other organs, is called congestive heart failure.

High blood pressure brings on heart failure by causing left ventricular hypertrophy, a thickening of the heart muscle that results in less effective muscle relaxation between heart beats. This makes it difficult for the heart to fill with enough blood to supply the body's organs, especially during exercise, leading your body to hold onto fluids and your heart rate to increase.

Symptoms of heart failure include:

- Shortness of breath
- Swelling in the feet, ankles, or abdomen
- Difficulty sleeping flat in bed
- Bloating
- Irregular pulse
- Nausea
- Fatigue
- Greater need to urinate at night

What Is Ischemic Heart Disease?

High blood pressure can also cause ischemic heart disease. This means that the heart muscle isn't getting enough blood. Ischemic heart disease is usually the result of atherosclerosis or hardening of the arteries (coronary artery disease), which impedes blood flow to the heart. Symptoms of ischemic heart disease may include:

Chest pain which may radiate (travel) to the arms, back, neck, or jaw

Chest pain with nausea, sweating, shortness of breath, and dizziness; these associated symptoms may also occur without chest pain

Irregular pulse

Fatigue and weakness

Any of these symptoms of ischemic heart disease warrant immediate medical evaluation.

How Is Hypertensive Heart Disease Diagnosed?

Your doctor will look for certain signs of hypertensive heart disease, including:

High blood pressure

Enlarged heart and irregular heartbeat

Fluid in the lungs or lower extremities

Unusual heart sounds

Your doctor may perform tests to determine if you have hypertensive heart disease, including a electrocardiogram, echocardiogram, cardiac stress test, chest X-ray, and coronary angiogram.

How Is Hypertensive Heart Disease Treated?

In order to treat hypertensive heart disease, your doctor has to treat the high blood pressure that is causing it. He or she will treat it with a variety of drugs, including [diuretics](#), [beta-blockers](#), [ACE inhibitors](#), [calcium channel blockers](#), [angiotensin II receptor blockers](#), and vasodilators.

In addition, your doctor may advise you to make changes to your lifestyle, including:

Diet: If heart failure is present, you should lower your daily intake of sodium to 2,000 mg or 2 g or less per day, eat foods high in fiber and potassium, limit total daily calories to lose weight if necessary, and limit intake of foods that contain refined sugar, saturated fats, and cholesterol.

Monitoring your weight: This involves daily recording of weight, increasing your activity level (as recommended by your doctor), resting between activities more often, and planning your activities.

Avoiding tobacco products and alcohol

Regular medical checkups: During follow-up visits, your doctor will make sure you are staying healthy and that your heart disease is not getting worse.

In some cases, you may need surgery to correct the heart disease. Surgeries include coronary bypass grafting (to bypass clogged heart arteries), mitral valve repair (to repair a leaky valve caused by cardiomyopathy or ischemia), and vascular surgeries (to repair defects of the blood vessels).

Further Reading:

[What is cardiomyopathy?](#)

Top Picks

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Reviewed by [Elizabeth Klodas, MD, FACC](#) on May 08, 2012

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