

Hypertensive Heart Disease

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What is Hypertensive Heart Disease?

Hypertensive heart disease refers to heart conditions caused by high blood pressure. The heart working under increased pressure causes some different heart disorders. Hypertensive heart disease includes heart failure, thickening of the heart muscle, coronary artery disease, and other conditions.

Hypertensive heart disease can cause serious health problems. It's the leading cause of death from high blood pressure.

Blood Pressure Categories



BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

What organs or part of the human body are affected? How does it affect the organs or the parts of the human body?

- Arteries
 - Heart
 - Brain
 - Eyes
 - Kidney
-

Arteries

Hypertension gradually increases the pressure of blood flowing through your arteries. This may result to:

Damaged and narrowed arteries - High blood pressure can damage the cells of your arteries' inner lining. Eventually, your artery walls become less elastic, limiting blood flow throughout your body.

Aneurysm - An aneurysm can potentially rupture and cause life-threatening internal bleeding.

Heart

High blood pressure can cause many problems for your heart, and this might cause:

Coronary artery disease - Arteries narrowed and damaged by high blood pressure have trouble supplying blood to your heart. When blood can't freely flow to the heart, it might cause you to have a heart attack.

Heart Failure - the strain on your heart caused by high blood pressure can cause the heart muscle to weaken and work less efficiently. And your heart begins to fail.

Brain

Your brain depends on a nourishing blood supply to work properly, but high blood pressure can cause several problems.

Stroke - Sudden interruption in the blood supply of the brain. A stroke occurs when part of your brain is deprived of oxygen and nutrients, causing brain cells to die.

Eyes

High blood pressure can damage the tiny, delicate blood vessels that supply blood to your eyes, causing:

Nerve damage - Blocked blood flow can damage the optic nerve, leading to bleeding within your eye or vision loss.

Kidneys

Kidneys filter excess fluid and waste from your blood, this is a process that requires healthy blood vessels. High blood pressure can damage the blood vessels in and leading to your kidneys. Having diabetes in addition to high blood pressure can worsen the damage.

Kidney failure - High blood pressure is one of the most common causes of kidney failure. Damaged blood vessels prevent kidneys from effectively filtering waste from your blood, allowing dangerous levels of fluid and waste to accumulate. You might ultimately require dialysis or kidney transplantation.

How can a person obtain it?

The main risk factor for hypertensive heart disease is high blood pressure. Your risk increases if:

You're overweight, you don't exercise enough, you smoke, you eat food high in fat and cholesterol.

How can it be detected?

Your doctor will review your medical history, conduct a physical exam, and run lab tests to check out your kidneys, sodium, potassium, and blood count.

Here are the tests that can help you determine the cause of your symptoms: If you want to know more about these tests, you can press the words that are linked to specific sites.

- **Electrocardiogram** monitors and records your heart's electrical activity. Your doctor will attach patches to your chest, legs, and arms. The results will be visible on a screen, and your doctor will interpret them.
- **Echocardiogram** takes a detailed picture of your heart using ultrasound.
- **Coronary angiography** examines the flow of blood through your coronary arteries. A thin tube called a catheter is inserted through your groin or an artery in your arm and up into the heart.
- Exercise stress test looks at how exercise affects your heart. You may be asked to pedal an exercise bike or walk on a treadmill.
- Nuclear stress test examines the flow of blood into the heart. The test is usually conducted while you're resting and exercising.

Here are the symptoms of Hypertensive Heart Disease (HHD)

- ♦ Chest Pain
- ♦ Tightness or pressure in chest
- ♦ Shortness of breath
- ♦ Fatigue
- ♦ Pain in the neck, back, arms, or shoulders
- ♦ Persistent cough
- ♦ Loss of appetite
- ♦ Leg or ankle swelling

How can Hypertensive Heart Disease be prevented?

Hypertensive Heart Disease can be prevented by:

Monitoring and preventing your blood pressure from getting too high. Lowering your blood pressure and cholesterol by eating a healthy diet and monitoring stress levels are possibly the best ways to prevent heart problems.

Maintaining a healthy weight, getting adequate sleep, and exercising regularly are common lifestyle recommendations. Talk to your doctor about ways to improve your overall health.

How can Hypertensive Heart Disease be treated?

Treatment of this disease depends on the seriousness of your illness, age, and your medical history.

The main goal is to prevent your blood from clotting.

Improve the flow of blood, and lower your cholesterol level.

Here are some common medication:

- Water pills to help lower blood pressure
- Nitrates to treat chest pain
- Statins to treat high cholesterol
- Calcium channel blockers and ACE inhibitors to help lower blood pressure
- Aspirin to prevent blood clots
- It is still better to consult a doctor so that you're drinking the right medications.

**Down below are the links where I found my information about
Hypertensive Heart Disease.**

Sources:

<https://images.app.goo.gl/SWjcgdg6uTkte6ty6>

<https://images.app.goo.gl/ieEPjf6vE1qKpPQn8>

<https://www.healthline.com/health/hypertensive-heart-disease>

<https://www.mayoclinic.org/diseases-conditions/high-blood-pressure/in-depth/high-blood-pressure/art-20045868#:~:text=High%20blood%20pressure%20forces%20your,failure%20and%20sudden%20cardiac%20death.>