What is Hypertrophic Cardiomyopathy?

Hypertrophic cardiomyopathy (HCM) is a thickening of the lower main pumping chamber of the heart (the left ventricle). It can affect people of any age but is more likely as age increases. It is most often diagnosed in middle age and symptoms can vary widely.

HCM is a heart muscle (myocardial) disorder that cannot be explained by another cardiac or general disease. HCM can be caused by abnormal genes (a genetic mutation) that makes the walls of the pumping chamber thicken and stiffen, limiting how much blood the ventricle can take in and pump out. It is considered the most common genetic disease of the heart muscle. Family members of people with HCM should have their hearts checked to see if they also have the condition.

What should I know about HCM?

There are two types of HCM. The most common type is obstructive HCM. Over two thirds of HCM patients have this type. In it, the wall (septum) between the two bottom chambers of the heart becomes enlarged. It gets in the way of blood flowing out of the heart and restricts blood flow out of the heart.

About one third of patients have non-obstructive HCM. In it, the walls of the heart’s main pumping chamber still become thickened and stiff, but it doesn’t block blood flow.

What are the symptoms of HCM?

The most common symptoms are:

- chest pain
- shortness of breath
- fatigue
- fainting
- dizziness
- rapid or irregular heartbeat (palpitations)

If symptoms get worse over time, new symptoms may appear. If this happens, people with HCM may have to make lifestyle changes, such as limiting their activity, to adapt to the disease.

Some people have no obvious symptoms.

Illustrations of a normal heart (left) and a heart with hypertrophic cardiomyopathy. Note that the heart walls (muscles) are much thicker (hypertrophied) in the heart with hypertrophic cardiomyopathy.
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Can HCM cause other health problems?
People with HCM are at greater risk of developing abnormal heart rhythms, including atrial fibrillation. AFib is a quivering or irregular heartbeat. It can lead to blood clots, stroke or other heart-related problems. It can also lead to sudden cardiac arrest, but this is rare.

HCM is a chronic disease that can progress to the point at which some patients can develop debilitating symptoms and/or heart failure. Heart failure means that the heart cannot pump enough blood to keep up with the needs of the body.

How is HCM diagnosed?
Your health care professional will want to know your medical history. They will want to know if you’ve had any signs or symptoms of HCM. They will also want to know if anyone in your family has been diagnosed with HCM, heart failure or cardiac arrest.

Your heart and lungs will be checked. Your health care professional will listen for certain sounds with a stethoscope. For example, you may have a heart murmur, which is an extra sound heard between heartbeats. The loudness, timing and location of a heart murmur may suggest obstructive HCM.

Your health care professional may do an echocardiogram. It checks the thickness of the heart muscle and blood flow from the heart. In some cases, another type of echocardiogram, transesophageal echo (or TEE), may be done. A TEE is done using a probe inserted in the throat while under sedation.

Other diagnostic tests may include:
- Electrocardiogram (ECG)
- Holter and event monitors
- Cardiac MRI
- Genetic testing
- Stress tests

Diagnosis of HCM is important because symptoms may be confused for other diseases.

What can be done for HCM?
There are currently no disease-specific medications for hypertrophic cardiomyopathy.

A healthy lifestyle is recommended for all people with HCM. When there are symptoms and complications, medications and procedures are used to manage them.

How can I learn more?

1. Call 1-800-AHA-USA1 (1-800-242-8721), or visit heart.org to learn more about heart disease and stroke.
2. Sign up to get Heart Insight, a free e-newsletter for heart patients and their families, at HeartInsight.org.
3. Connect with others sharing similar journeys with heart disease and stroke by joining our Support Network at heart.org/SupportNetwork.

Do you have questions for your doctor or nurse?
Take a few minutes to write down your questions for the next time you see your health care provider.

For example:
- What kind of lifestyle changes do I need to make?
- What should I do if my symptoms get worse?

We have many other fact sheets to help you make healthier choices to reduce your risk, manage your condition or care for a loved one. Visit heart.org/AnswersByHeart to learn more.