# Hypertrophic Cardiomyopathy

#### Overview

**Hypertrophic cardiomyopathy**, or **HCM**, is a chronic disease involving thickening of the heart muscle. HCM can lead to the development of debilitating symptoms and serious complications.<sup>1,2</sup>

The most frequent cause of HCM is the presence of mutations in sarcomere protein genes.<sup>3</sup>

There are two main subtypes of HCM:

#### **Obstructive HCM:**

When the left ventricular outflow tract (LVOT) becomes blocked or has reduced blood flow due to the heart walls becoming thick or stiff.<sup>4</sup>

The majority of HCM cases are obstructive in nature.

#### **Non-obstructive HCM:**

When the thickened heart muscle does not cause restriction of blood flow.<sup>4</sup>

In both obstructive or non-obstructive HCM patients, symptoms such as chest pain, shortness of breath, palpitations, and fainting may arise. These symptoms may interfere with a patient's ability to participate in daily activities. Complications of HCM can include atrial fibrillation, stroke, heart failure and in rare cases, sudden cardiac death.<sup>2</sup>

### Prevalence Around the World

HCM is estimated to affect **1 in 500 adults**, although recent studies suggest a higher prevalence exists.<sup>5</sup>

### Symptoms

Common signs and symptoms of HCM can include:<sup>6,7</sup>



HCM may affect people in different ways. For some, symptoms come and go while others may experience symptoms that can persist for a long time. Still, others may not experience symptoms right away, yet the disease may continue to progress.

# Diagnosis

**HCM is often inherited and is the most common form of genetic heart disease.**<sup>5</sup> It can happen at any age, but patients are typically diagnosed in their midlife, and the condition can be chronic.<sup>8</sup> Knowing one's medical history and any signs and symptoms is an important first step in receiving an accurate diagnosis.

Some tests doctors may use to diagnose and monitor HCM include:<sup>6</sup>

- Echocardiogram: An echocardiogram uses sound waves (ultrasound) to see if your heart's muscle is abnormally thick. It also shows how well the heart's chambers and valves are pumping blood.
- **Cardiac MRI:** A cardiac MRI uses powerful magnets and radio waves to create images of your heart. It gives your doctor information about your heart muscle and shows how your heart and heart valves work.



## Bristol Myers Squibb is committed to helping patients with hypertrophic cardiomyopathy and other cardiovascular diseases.

1. Maron BJ et al. Lancet. 2013; 381 (9862):242-255.

2. Naidu SS, ed. Hypertrophic Cardiomyopathy. London, Eng: Springer-Verlag; 2015.

3. Garfinkel AC, Seidman JG, Seidman CE. Genetic pathogenesis of hypertrophic and dilated cardiomyopathy. Heart Fail Clin. 2018;14(2):139-146.

4. Stanford Health Care. Hypertrophic cardiomyopathy. Accessed June 14, 2021. https://stanfordhealthcare.org/medical-conditions/blood-heart-circulation/hypertrophic-cardiomyopathy.html 5. Semsarian C, Ingles J, Maron MS, Maron BJ. New perspectives on the prevalence of hypertrophic cardiomyopathy. J Am Coll Cardiol. 2015;65(12):1249-1254.

6. Mayo Clinic. Hypertrophic cardiomyopathy. https://www.mayoclinic.org/diseases-conditions/hypertrophic-cardiomyopathy/diagnosis-treatment/drc-20350204. Last accessed 29 June 2021.

7. University of Maryland Medical Center. Hypertrophic cardiomyopathy types, symptoms and causes. Accessed June 14, 2021.

https://www.umms.org/ummc/health-services/heart-vascular/services/hypertrophic-cardiomyopathy/types-symptoms-causes

8. Jacobs C. Hypertrophic cardiomyopathy in adults: an overview. J Am Assoc Nurse Pract. 2014;26(9):465-470.