

Hypertrophic Cardiomyopathy (HCM)

The Jordan Boyd Inherited Heart Disease Clinic

Notes:

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

Find all patient education resources here:
www.nshealth.ca/patient-education-resources

Connect with a registered nurse in Nova Scotia any time:
Call 811 or visit: <https://811.novascotia.ca>

Prepared by: The Jordan Boyd Inherited Heart Disease Clinic
Illustration by: Dr. David C. Lee
Designed and Managed by: Library Services

WG85-0631 © September 2026 Nova Scotia Health Authority
To be reviewed September 2029 or sooner, if needed.
Learn more:
<https://library.nshealth.ca/patient-education-resources>

Hypertrophic Cardiomyopathy (HCM)

How does the heart work?

- The heart is a hollow organ made of muscle. It has 4 chambers: 2 at the top (**atria**) and 2 at the bottom (**ventricles**).
- Blood flows from the body into the top chambers. The blood is pumped to the bottom chambers, and is then pumped back out to the body.
- Electric signals that pass through the heart muscle control the pumping of the chambers. This electrical activity is called the **heart rhythm**.

What is hypertrophic cardiomyopathy (HCM)?

- HCM thickens the heart muscle. This usually affects the **septum** (the wall between the 2 bottom chambers).
- When the muscle thickens, it gets stiff. This makes it hard for the bottom chambers to relax and fill with blood before each heartbeat.

- Treatments may include:
 - › Medications
 - › A pacemaker called an **internal cardioverter defibrillator** (ICD). The ICD identifies a fast heart rhythm and slows your heart rhythm down to a safer speed
 - › Heart surgery to make it easier for the blood to leave your heart
 - › A heart transplant. This is rare.

For more information about HCM:

- **The Canadian Sudden Arrhythmia Death Syndromes (SADS) Foundation**
 - › www.sads.ca
 - › Has information about inherited heart diseases and a booklet about HCM that you can download
- **Heart and Stroke Foundation of Canada**
 - › www.heartandstroke.ca/heart/conditions/cardiomyopathy
- **HealthLink BC**
 - › www.healthlinkbc.ca/health-topics/hypertrophic-cardiomyopathy

› **Echocardiogram (Echo):** An ultrasound that measures the size of your heart chambers and how well your heart is pumping.

› **Cardiac MRI:** A scan using magnets and radio waves. It measures the size of your heart chambers and how well your heart pumps. It also shows any fat or scar tissue in the heart muscle.

- **Your cardiologist (heart doctor) may want you to have other tests when they are diagnosing you.** They will talk with you about this, if needed.

Genetic testing and family screening

- If your cardiologist thinks changes in your genes caused your HCM, they may ask if you would like to talk with a genetic counsellor about genetic testing.
- Your cardiologist may also want to ask other members of your family to test for HCM. They may ask you to give letters with information about HCM to your family members.

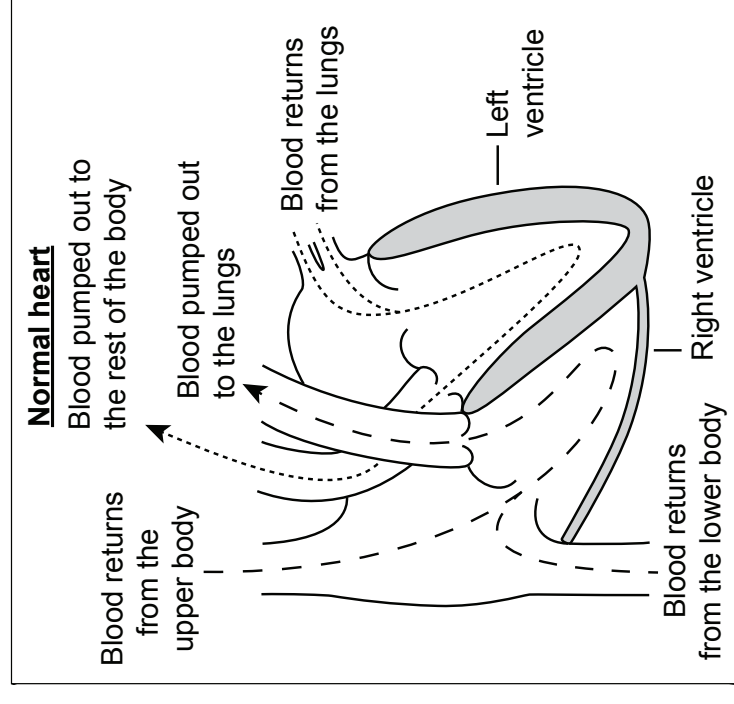
How is HCM treated?

- There is no cure for HCM, but there are treatments that can control a fast heart rhythm and help with your symptoms.

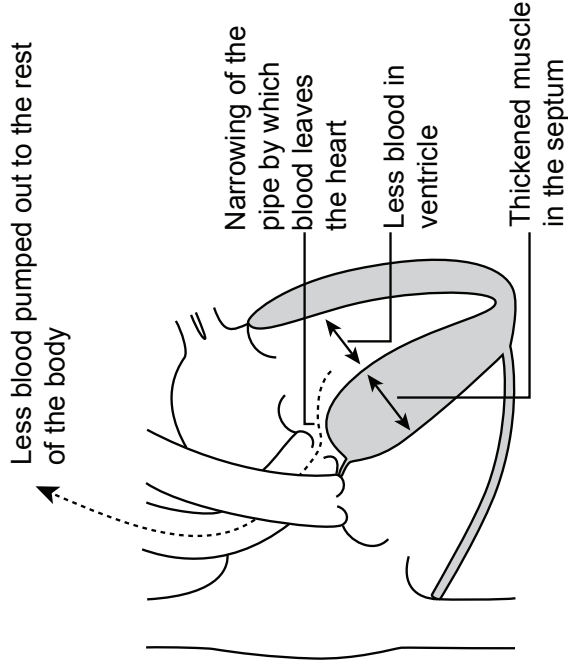
- Thick heart muscle can make it harder for blood to leave the heart. This lowers the amount of blood the heart pumps out to the rest of the body, causing low pressure.
- Thick heart muscle can cause scar tissue. Scar tissue can put you at a higher risk of a dangerous, fast heart rhythm.

What causes HCM?

- HCM can be caused by changes in your genes. These changes can be hereditary (passed from parents to their children).
- Sometimes the cause is not known.



Hypertrophic cardiomyopathy



Tell your health care provider if you had a relative who died suddenly at a young age. This could have been caused by HCM.

What are the symptoms of HCM?

- Symptoms may include:
 - › Trouble breathing
 - › Chest pain
 - › Palpitations (feeling like your heart is jumping, racing, or fluttering)
 - › Lightheadedness
 - › Blackouts (passing out or not being able to remember a certain amount of time)
- These symptoms can be caused by an abnormal heart rhythm or low blood pressure from HCM.

How is HCM diagnosed?

- Health care providers use different tests to diagnose HCM. You may have some of these tests:
 - › **Electrocardiogram (ECG/EKG):** A recording of your heart rhythm for 10 to 20 seconds.
 - › **Holter monitor:** A recording of your heart rhythm for 24 hours (1 day).
 - › **Exercise stress test:** A recording of your heart rhythm and blood pressure while you run on a treadmill.