Dilated Cardiomyopathy (DCM)

Inherited Heart Disease (IHD) Clinic
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 outside the heart into the top chambers, is pumped to the bottom chambers, and is then pumped back out to the body (see pictures).

The pumping of the heart chambers is controlled by electrical signals that pass through the heart muscle. This electrical activity is called the heart rhythm.

What is DCM?
In dilated cardiomyopathy (DCM), the heart muscle becomes weak. This makes it harder for the heart to pump blood out to the body. This causes the bottom chambers to dilate (stretch). A weak heart can also cause fluid to build up in parts of the body like the lungs (causing shortness of breath) and the ankles or belly (causing swelling).

DCM may also affect the electrical activity of the heart and can cause fast, dangerous heart rhythms.

What causes DCM?
There are many different causes of DCM:

› viruses
› autoimmune disease (where your immune system attacks your body)
› too much alcohol
› recreational drugs (e.g., cocaine)
› pregnancy
› certain medications (such as chemotherapy drugs)

DCM can also be caused by a change in your DNA (genes). These changes can be hereditary (passed on from parents to children).
What are the symptoms of DCM?
Symptoms may include:
› shortness of breath, swelling in your ankles and belly, and tiredness. These are often caused by fluid buildup in the body.
› dizziness, lightheadedness, palpitations (feeling like your heart is jumping, racing, or fluttering), or blackouts. These can be caused by fast, dangerous heart rhythms.

How is DCM diagnosed?
A number of tests are used to diagnose DCM. Your health care provider may arrange for you to have some of these tests:

**Electrocardiogram (ECG):** A recording of your heart rhythm for 10 seconds.

**Holter monitor:** A recording of your heart rhythm for 24 hours (1 day).

**Echocardiogram (Echo):** An ultrasound is used to measure the size of the heart chambers and how well the heart is pumping.

**Cardiac MRI:** A scan using magnets and radio waves. It can measure the size of the heart
chambers, how well the heart is pumping, and show fat and scar tissue in the heart muscle.

*Your cardiologist (heart doctor) may also suggest other tests. They will talk with you about this, if needed.*

**Genetic testing and family screening**

If your cardiologist suspects that a change in your DNA could have caused your DCM, they may ask if you would like to talk with a genetic counsellor about genetic testing. Your cardiologist may also want to invite other members of your family to be tested for DCM. They may ask you to help by passing letters on to your family.
How is DCM treated?
There is no cure for DCM, but there are treatments available to control fast heart rhythms and to make you feel better.

Treatments may include:
› medications to treat fluid buildup, improve how well your heart is pumping, and control fast heart rhythms
› a special pacemaker called an internal cardioverter defibrillator (ICD) (to identify and treat fast heart rhythms)
› a heart transplant – this is rare

For more info, visit:
Heart and Stroke Foundation of Canada
› www.heartandstroke.ca/heart/conditions/cardiomyopathy
HealthLink BC
› www.healthlinkbc.ca/health-topics/hw52466
Cardiomyopathy UK
› www.cardiomyopathy.org/dilated-cardiomyopathy/intro
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