Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC)

Inherited Heart Disease Clinic
What is ARVC?
The word ‘arrhythmogenic’ refers to any heart rhythm disease that changes the normal electrical current of your heartbeat and causes it to become irregular. ‘Cardiomyopathy’ is a disease of the heart muscle - in this case, a worsening condition, where heart muscle is slowly replaced by scar tissue and fatty tissue. Both of these are present in ARVC. They mainly affect the right ventricle, which is one of the 2 main pumping chambers of the heart.

ARVC is sometimes called ARVD, “Arrhythmogenic Right Ventricular Dysplasia”.

What causes ARVC?
Many cases of ARVC are hereditary. It is possible that an error occurs in a gene that may be passed from parent to child. Members of a family who are affected with this disease have a 50:50 chance of inheriting the genetic defect. This damaged gene may result in heart muscle cells in the right ventricle being replaced by scar and fatty tissue. This type of muscle loss can then disturb the electrical signals that control the heartbeat and make the heartbeat irregular.
Symptoms
The symptoms of ARVC are the same as with most conditions that interfere with the heart’s ability to efficiently pump blood: lightheadedness, fatigue (tiredness), fainting spells, heart palpitations and (in the worst case) sudden cardiac death (the heart stops beating suddenly and death occurs).

Diagnosis
There is no one test to diagnose ARVC, but rather a number of tests to make sure an accurate diagnosis is made.

Your doctor may arrange for you to have some of these tests:

**Electrocardiogram (ECG):** An ECG is an electrical tracing of your heartbeat.

**Signal average ECG:** This test is similar to a regular ECG, except that it gives a more detailed electrical conduction reading of your heartbeat.

**Holter Monitor:** The monitor continuously records your heart’s rhythm for about 24 hours.

**Echocardiogram (ECHO):** Ultrasound pictures of your heart show the thickness of the heart muscle and how well it is pumping.
MRI: An MRI is a scan that gives a clearer, more detailed picture of the layers of heart muscle than an ECHO. Other tests may also be needed or suggested by your cardiologist (heart doctor). Your cardiologist and genetic counsellor will talk about this with you.

Treatment
Although there is no cure for ARVC, some treatments may make you feel better.

Your treatment will depend on how you are feeling and how well your heart is working. Your doctor will review all of your test reports and together you will decide which treatment may work best.

Treatments may include: medications, a pacemaker (for slow heart rates), sometimes an internal defibrillator (ICD - to detect and treat dangerous heart rhythms) and heart transplantation (rare).
What are your questions? Please ask. We are here to help you.
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The information in this pamphlet is to be updated every 3 years or as needed.

Clinic staff
- Dr. Martin Gardner MD, FRCP(C), FCCS
- Dr. Chris Gray MD, FRCP(C)
- Dr. Ciorstí MacIntyre MD, FRCP(C)
- Victoria Newman-Burd RN, BSN, CCRP
- Dr. Sarah Dyack MD, FRCP(C), FCCMG
- Amy Crowley MS-CGC
- Natasha VanIderstine MS-CGC