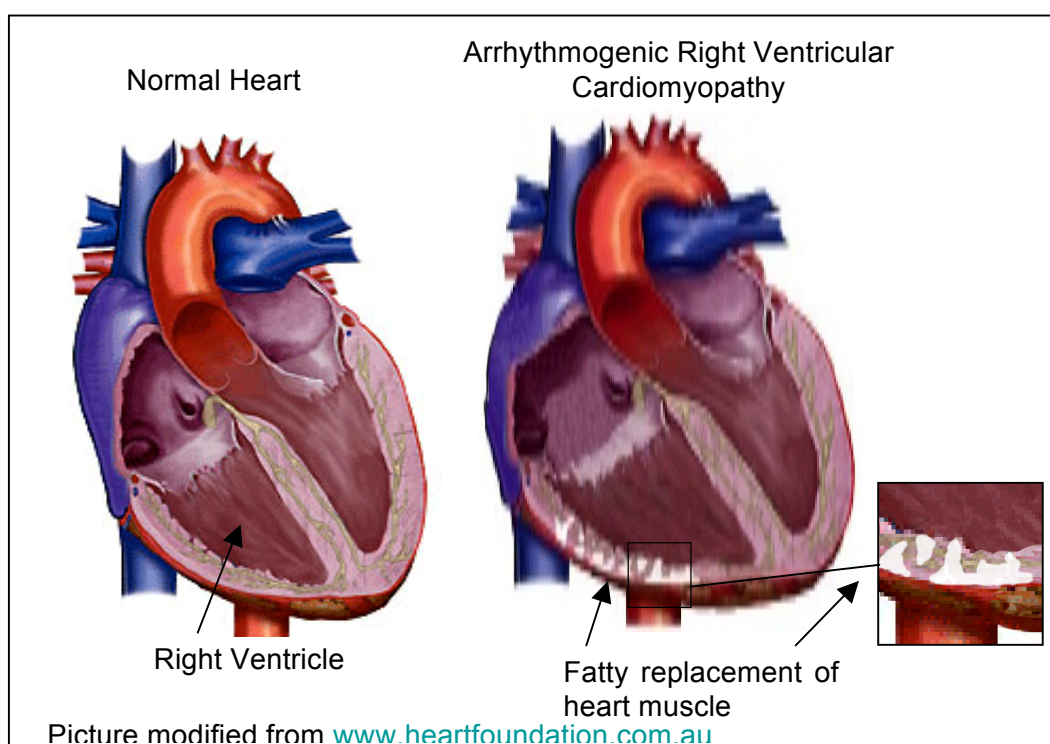


Arrhythmogenic Right Ventricular Cardiomyopathy (ARVC)

Arrhythmogenic right ventricular cardiomyopathy (ARVC) is a condition of the heart muscle in which normal heart muscle cells on the right-hand side of the heart are replaced by fat and scar tissue. ARVC is caused by an alteration in a gene that you were born with; it is not caused by anything you have done or not done (e.g. eaten certain foods, used a particular product etc). The changes in the heart muscle can cause two main problems. First, it can affect the electrical system of the heart leading to heart rhythm abnormalities. Second, the right side of the heart can become enlarged and not pump as it should, leading to heart failure. Some people with the condition will have no symptoms, others will develop palpitations, chest pain, dizziness and fainting episodes, and sometimes it can lead to heart failure or sudden cardiac death, especially in young athletes.



How it is inherited

ARVC is inherited as an autosomal dominant condition, which means that only one copy of a gene alteration is required to cause disease (see section on Genetic Inheritance for more information).

Genetic testing

Major advances have been made in genetic testing for ARVC in recent years. Genetic testing is now commercially available and involves screening five genes that can cause the condition. The gene alteration will be identified in approximately 40-50% of families. Further research is needed to identify more genes involved in this disease.

Treatment

No specific treatments are available but there is evidence that the disease is made worse by vigorous sporting activity, particularly competitive cycling, so this should be avoided. It is recommended that people with ARVC see their Cardiologist at least once a year.

Those at highest risk benefit from a pacemaker-defibrillator (ICD- Implantable cardioverter defibrillator). For more information see the ICD information sheet.

For more information

To find out more about genetic heart conditions and the latest research news, please visit the Australian Genetic Heart Disease Registry at www.heartregistry.org.au or the Cardiac Inherited Diseases Group (New Zealand) at www.cidg.org