

Dilated Cardiomyopathy

Dilated cardiomyopathy belongs to group of [cardiomyopathies](#). These diseases affect the heart muscle and their etiology is often unknown. The treatment is difficult and mostly only symptomatic and the complications can be fatal.

Causes

Dilated cardiomyopathy often occurs in young adults, men are more often affected than women. It is more frequent in [alcoholics](#) as the alcohol is toxic for the heart muscle, but that is not always the rule. Dilated cardiomyopathy was also reported after some heart viral infections (infectious [myocarditis](#)).

Symptoms

Cardiac tissue in dilated cardiomyopathy loses the ability to properly work as a pump. Heart muscle dilates and is unable to fully contract. The condition manifests as a [heart failure](#) of various severity ([shortness of breath](#), [pulmonary edema](#), [swelling](#) of the lower extremities, etc.). For more information see the article dedicated to the [heart failure](#). Affected heart muscle may cause more frequent occurrence of arrhythmias. Some of them, such as [atrial fibrillation](#), are quite harmless but the other may be severely dangerous (such as ventricular tachycardia transitioned into lethal [ventricular fibrillation](#)).

Diagnosis

If we confirm a [heart failure](#) in a young person, we should always think about the possibility of dilated cardiomyopathy. The [ECG](#) may show some conduction abnormalities of the heart muscle but the finding is usually unspecific. [Echocardiography](#) is a very important testing method that confirms decreased contracting ability and excessive dilation of cardiac ventricles. [Coronary angiography](#) is important to distinguish between dilated cardiomyopathy and heart ischemic disease. Narrowing of the coronary arteries is evidence of the ischemic disease and vice versa. Heart muscle biopsy may be another step of the examination. In this examination the physician uses a fine needle to get a small tissue sample that can be examined histologically to confirm changes typical for [myocarditis](#).

Note: A question about the alcohol consumption should be a part of the diagnostic process.

Prevention

The prevention options are very limited. It is advisable not to drink alcohol regularly in bigger doses but it is practically impossible to influence the other causative factors.

Treatment

The disease itself is untreatable. The therapy focuses on symptomatic treatment of the [heart failure](#) and other complications. The pharmacologic approach is usually given the priority with administration of [diuretics](#) (drugs decreasing the volume load by increasing urination), [ACE-inhibitors](#) ([antihypertensive](#)

[drugs](#) protecting the heart muscle) and [beta-blockers](#) (drug relieving the heart and protecting from rhythm disorders).

When a serious arrhythmia occurs, the doctors may indicate the patient for an ICD implantation. The ICD (Implantable Cardioverter Defibrillator) is a device resembling a pacemaker that is implanted under the skin of the chest. The ICD monitors the rhythm of the patient and in case of a serious arrhythmia it emits an electric shock to restore the normal rhythm.

If there is a serious heart dysfunction that does not respond to pharmacotherapy, heart transplantation is the method of choice. However, it is a difficult procedure burdened with many possible complications.