



CARDIOMYOPATHY

What is it?

Cardiomyopathy is a disease of the heart muscle. It results in weakening of the heart muscle, especially of the left-sided pumping chamber (medical term: left ventricle). (see Normal Heart)

Cardiomyopathy can occur for many reasons. It may occur during or after a pregnancy (medical term: peripartum cardiomyopathy) it may occur after an infection (medical term: myocarditis) or it may be related to other heart conditions such as heart valve disease or narrowing of the blood vessels that supply the heart muscle (medical term: coronary artery disease). Often we do not know the cause of the cardiomyopathy (medical term: idiopathic cardiomyopathy). Hypertrophic cardiomyopathy is due to thickening of the heart muscle and is discussed elsewhere. (see Hypertrophic Cardiomyopathy)

The strength of the heart muscle is often assessed by examining the ability of the heart to pump blood (medical term: ejection fraction). A normal ejection fraction is greater than 55%. The ejection fraction is usually measured by an ultrasound of the heart (medical term: echocardiogram).

Cardiomyopathy can limit your ability to exercise, it can cause fast heart rhythms (medical term: arrhythmias), fainting spells (medical term: syncope) or heart failure. Uncommonly, cardiomyopathies can be associated with dangerous heart rhythms called ventricular tachycardia and ventricular fibrillation which can be fatal.

Peripartum cardiomyopathy has some special considerations. It usually occurs during the late part of a pregnancy or in the first months after the delivery. The cause of peripartum cardiomyopathy is not known. Women often present with weakened heart muscle and heart failure. Not all women survive. Of the women who do survive, some will have complete recovery of the heart muscle. Others will be left with weakened heart muscle. For women who are left with weakened heart muscle, another pregnancy can be very dangerous.

How safe is it for me to become pregnant?

Pregnancy is associated with increased demands on the heart (see Cardiovascular Changes during Pregnancy). In women with cardiomyopathy, the ability to tolerate the increased demands of pregnancy is primarily determined by the strength of your heart muscle (medical term: ejection fraction). If your heart is too weak to adapt to the changes of pregnancy, you could develop heart failure, fast heart rhythms (medical term: arrhythmias), chest pain or blood clots (medical term: thromboembolic stroke) during pregnancy. Deaths have been reported during pregnancy. For this reason it is very important to see a heart specialist before pregnancy to discuss the risks of pregnancy.

Every pregnancy carries some risk for complications and this risk may be increased by your underlying heart disease. All women have to consider the safety of a pregnancy taking their underlying heart disease into account. Every person's heart condition is different and therefore the safety of pregnancy differs too. Before proceeding with trying to have a baby it is very important that you discuss your specific condition and the details of your situation with a heart specialist who knows about the care of women with heart disease in pregnancy.

Issues for the mother

Which forms of birth control are safe?

Contraceptive methods should be discussed with your physician. If you have weakened heart muscle or fast heart rhythms (medical term: arrhythmias) then estrogen-containing contraceptives may not be suitable for you. Contraception should be discussed with a doctor who has an understanding of your underlying heart condition. (See Contraception)

What are my risks if I become pregnant?

In order to determine your risk during pregnancy, you should see your heart specialist before getting pregnant. You may be required to have additional heart tests such as an ultrasound of your heart (medical term: echocardiogram) to better determine the risks of pregnancy.

Idiopathic cardiomyopathy. Women with idiopathic cardiomyopathy are at risk for developing heart failure, fast heart rhythms (medical term: arrhythmias) and strokes during pregnancy. Although rare, deaths have been reported. Most women who feel well before pregnancy and have only mild heart weakening do well during pregnancy. However, if you have moderate or severe weakening of your heart muscle, you are at high risk for heart problems during pregnancy. If you had heart failure, rhythm problems or a stroke before pregnancy, your risk for complications during pregnancy is even higher. Other cardiac characteristics can have an impact on pregnancy outcomes (see General Considerations).

Peripartum cardiomyopathy. Women with peripartum cardiomyopathy have special considerations. Even if they feel well and their heart is not weakened, they are at risk of having further irreversible heart muscle weakening, heart failure, heart rhythm problems or stroke during subsequent pregnancy. If they have weakened heart muscle before a subsequent pregnancy the risks are very high and as many as 20% of such women will not survive the pregnancy.

Some medications are not safe in pregnancy. Do not stop medications without first checking with your doctor, but do check your medications out before pregnancy so you will have a plan. If you did not do that, then do so as soon as you know you are pregnant. The MOTHERISK website is an excellent resource. (<http://www.motherisk.org>)

Issues for the baby

Women with cardiomyopathies may have early deliveries (medical term: premature delivery) or small babies (medical term: low birth weight for age, small for gestational age).

Medical care during pregnancy and delivery

Where should I be followed?

Once pregnant, you should be followed at a center that specializes in high-risk pregnancy. Your specialists will determine the frequency of follow up through your pregnancy.

What can I do and expect during pregnancy?

Your heart specialist will arrange for check up visits during your pregnancy. In addition your doctors will arrange for ultrasounds of your heart (medical term: echocardiograms) to help determine how your heart is dealing with the stress of the pregnancy.

You need to pay attention to symptoms related to your heart. Notify your doctor if you develop symptoms such as shortness of breath, swelling of the legs, fast heart beats or fainting spells.

If your symptoms are worrying and you cannot get in touch with your doctor, go to your nearest emergency department. It is helpful to keep a letter from your doctor explaining your condition so that other health care professionals can better help you in an emergency situation.

Labour and delivery should be planned carefully with a team including a heart specialist, a high-risk obstetrician and an anesthetist. In general, a vaginal delivery is recommended.