



HYPERTROPHIC CARDIOMYOPATHY

What is it?

Hypertrophic cardiomyopathy (HCM) is a disease of the heart muscle in which a portion of the heart muscle becomes thickened (medical term: hypertrophy). The thickening typically occurs in the wall between the two pumping chambers of the heart (medical term: ventricular septum), but may also occur elsewhere. The thickening can make the heart stiff. The thickening of the heart muscle can sometimes cause a blockage (medical term: obstruction), making it difficult for blood to be pumped into the large blood vessel that exits the heart called the aorta. This form of hypertrophic cardiomyopathy is called “hypertrophic obstructive cardiomyopathy”. One of the heart valves called the mitral valve (see The Normal Heart) may become leaky (medical term: mitral regurgitation). Less commonly, the heart muscle can weaken and lead to heart failure.

In most cases hypertrophic cardiomyopathy occurs because of genetic factors. The condition is inherited from your relatives and there is a 50% chance that you will pass it along to your children.

Hypertrophic cardiomyopathy can limit your ability to exercise, it can cause racing heart beats (medical term: palpitations), fainting spells or chest pain. Less commonly cardiomyopathies can be associated with dangerous heart rhythms called ventricular tachycardia and ventricular fibrillation and these heart rhythms can be fatal.

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 HCM, the ability to tolerate these changes is judged primarily by your ability to exercise, the strength of the heart muscle and the degree of obstruction. Most women who feel well before pregnancy do well during 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 you should 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?

Birth control (medical term: contraceptives) should be discussed with your physician. In general, most forms of contraception are fine. If you have weak heart muscle or abnormal 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 Birth Control)

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.

If you felt well before pregnancy, you would be expected to do well during your pregnancy. If you have a history of symptoms before pregnancy related to your condition, there is a 30-40% risk that you will develop problems during your pregnancy. These could include chest pain, heart failure, fainting, stroke or fast heart rhythms. If your pregnancy is complicated by any of these, there is a chance that you will go into early labor. Although rare, deaths have been reported and therefore it is very important to discuss pregnancy with your heart specialist.

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

Children have a 50% risk of inheriting HCM from their parents. This condition is not always detected in young children, so your children should be checked on a regular basis, or should have genetic testing if the abnormal gene causing your own condition has been identified.

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 echocardiograms to help determine how your heart is dealing with the stress of the pregnancy.

Most women with HCM do well throughout pregnancy; however, you need to pay attention to symptoms related to your heart. Notify your doctor if you develop symptoms such as chest pain, shortness of breath, swelling of the legs, fast heartbeats 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 specialist in congenital heart disease, an obstetrician, an anesthetist, and a high-risk obstetrician. A vaginal delivery is usually recommended. Good pain management is important.