



# What is Peripartum Cardiomyopathy?

Peripartum is the time shortly before, during and immediately after giving birth. Cardiomyopathy means heart muscle disease. So peripartum cardiomyopathy (PPCM), also known as postpartum cardiomyopathy, is an uncommon form of heart failure that happens during the last month of pregnancy or up to five months after birth.



#### What are the symptoms of PPCM?

Symptoms are often similar to those of third-trimester pregnancy, such as fatigue, shortness of breath and swollen ankles. But with PPCM, symptoms are magnified. If there's doubt, a thorough workup is needed.

Other signs include:

- Shortness of breath during activity
- · Trouble breathing while lying down
- Extreme fatique
- Fluid buildup in the ankles and legs
- Racing heart or palpitations
- Low blood pressure

## What's happening to the heart when PPCM occurs?

PPCM is a dilated form of cardiomyopathy when the heart chambers enlarge and the muscle weakens. This causes a decrease in the percentage of blood ejected, also known as the ejection fraction (EF), from the left ventricle of the heart with each contraction. That leads to less blood flow. Then the heart can't meet the demands of the body's organs for oxygen, affecting the lungs, liver and other body systems.

A normal EF is between 55% and 70%; usually in PPCM, the EF weakens to less than 45%. All women are different, which is why it's very important to talk with your health care provider about what EF means for your specific condition.

#### How rare is PPCM, and who's at risk?

The occurrence varies globally, from 1 in 132

deliveries in Nigeria to 1 in 15,533 live births in Japan. In the United States, the incidence is fairly rare, between 1,000 and 1,300 women develop the condition every year. But some reports predict increasing numbers due to:

- Rise in maternal age
- More multiple gestation pregnancies
- Rising rates of chronic hypertension and preeclampsia
- · Better recognition of the disease

### What causes PPCM, and what are other risk factors?

- Diabetes
- Malnutrition
- Obesity
- Maternal age of 30+
- African American heritage
- Preeclampsia or hypertension
- Multiple gestations
- Genetic components, even if a woman is not known to have heart failure in her family

Not all causes of PPCM are known, but studies suggest it may be due to:

- Inflamed heart (myocarditis) potentially caused by a virus
- Abnormal immune response
- Abnormal adaptation of the heart in response to normal physiologic changes during pregnancy





 Excessive hormone prolactin production (a potential treatment for PPCM is bromocriptine, which blocks secretion of prolactin)

#### What are treatments for PPCM?

How PPCM is treated depends on whether it's diagnosed during pregnancy or after delivery. Treatments during pregnancy may need modifications to reduce risk to the fetus. If the mother-to-be is in distress, her OB-GYN as well as her team of cardiologists, heart failure specialists, maternal fetal medicine specialists and OB and cardiac anesthesiologists may recommend early delivery. Stable patients can typically have a vaginal delivery, unless there's another reason for a C-section.

Diuretics can help keep fluid from building up and staying in the mother's lungs. Beta blockers are often recommended before and after delivery, and other medications might be recommended after delivery.

#### What's the major concern for mothers?

Unfortunately, PPCM can be associated with risk of serious complications related to poor pump function of the heart. This can result in pulmonary edema (when the lungs are filled with fluid); blood clots; organ failure (shock), which may require

mechanical support to help the heart; cardiac transplantation; or death.

#### Will PPCM affect the baby?

When the mother's health is poor, the fetus' health is also threatened. If the mother's blood pressure is dangerously low and her heart isn't pumping enough blood to adequately support the placenta, premature delivery or fetal loss may occur.

#### What's the prognosis?

Prognoses vary, but up to 70% of women recover heart function or are at least stabilized by medications. In extreme cases, women have severe heart failure that requires mechanical support (left ventricular assistance device) or even a heart transplant.

## What can be done to minimize risk of PPCM?

The best way to reduce risk is to take care of your heart. Healthy heart habits include being physically active, eating a healthy dietary pattern and avoiding use of tobacco/vaping products and alcohol. If you have questions or concerns, consult your health care provider.

#### **HOW CAN I LEARN MORE?**

- 1 Call 1-800-AHA-USA1 (1-800-242-8721), or visit goredforwomen.org/Pregnancy to learn more about the connection between pregnancy and cardiovascular risk.
- Connect with other moms who've been where you are and get the support you need by joining our Maternal Health Forum on the Support Network at goredforwomen.org/ MaternalSupport.

# QUESTIONS FOR YOUR DOCTOR OR NURSE?

Take a few minutes to write down your questions for the next time you see your health care professional.

For example:

Am I at risk for PPCM?

How will I know if my symptoms are more than common third trimester/postpregnancy issues?

### **MY QUESTIONS:**

A healthy pregnancy is best for both mom and baby. We have a library of resources to help you stay safe and healthy before, during and after pregnancy. Visit **goredforwomen.org/Pregnancy** to learn more.