

What Causes Critical Congenital Heart Disease?

The actual cause is not known. However, it is known that certain environmental and genetic risk factors can increase the risk of abnormalities in the development of a baby's heart:

1. Drinking alcohol regularly during pregnancy
2. Maternal diabetes
3. Mother's age (over 40)
4. Poor nutrition during pregnancy
5. Rubella or other viral illnesses during pregnancy
6. Chromosomal (genetic) disorders such as Down Syndrome or DiGeorge Syndrome

How does a typical heart work?

The heart is a muscle and its job is to pump blood throughout the body. It is divided into four chambers-two on the right and two on the left. The right side pumps blood into the lungs and the left side pumps blood into the rest of the body.

What are the signs/symptoms of Critical Congenital Heart Disease?

- Blush skin color, especially around the lips and fingernails
- Delayed growth and development
- Poor feeding and poor growth
- Fast and difficult breathing
- Lethargy (tiredness)

How is Critical Congenital Heart Disease detected?

Sometimes critical congenital heart disease can be detected prenatally on a sonogram or during your baby's first physical exam. However, many babies can appear healthy in the first few days which makes pulse oximetry screening important.

What is Pulse Oximetry Screening?

Pulse Oximetry Screening is a painless test that detects the oxygen level in your baby's blood. The level of oxygen needs to be checked in the right hand and either the right or left foot.

When is the Pulse Oximetry screening performed?

The screening is performed between 24-48 hours after birth.

How is the Pulse Oximetry Screening Performed?

A soft sensor is wrapped around the baby's right hand and one of the feet with the use of a sticky strip like a band aid. The sensor uses a light to detect the oxygen level of the baby's blood.

What are normal Pulse Oximetry Screening results?

A normal reading is considered to be 95% or greater. The difference between the right hand and a foot should be less than 3%.

What happens if the results are abnormal?

Your baby's doctor will order additional tests to find out why the oxygen level is low. The best test to determine if a baby has Critical Congenital Heart Disease is an echocardiogram, which is an ultrasound of the heart.

What is the treatment for Critical Congenital Heart disease?

Medication can be used temporarily but surgery is typically needed to correct blood flow.

Are there available resources to assist families affected by Critical Congenital Heart Disease?

Yes, you can call the Office for Genetics and People with Special Health Care Needs at 410-767-6736 or 1-855-535-5655 for help in locating resources.

Additional Resources:

- Congenital Heart Disease Information and Resources
<http://www.tchin.org/>
1-609-822-1572
- Little Hearts Inc.
www.littlehearts.org
1-866-435-4673
- March of Dimes
www.marchofdimes.com
1-410-546-2241
- The Parents' Place Of Maryland
www.ppmd.org
1-410-768-9100