Perspective

# Congenital Heart Defects in Children

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## INTRODUCTION

A natural heart disfigurement is a problem with the structure of the heart that a child is born with. Some natural heart defects in children are simple and do not need treatment. Other natural heart defects in children are more complex and may need several surgeries performed over a period of several times. Learning about your child's natural heart disfigurement can help you understand the condition and know what you can anticipate in the coming months and times.

## DESCRIPTION

#### **Symptoms**

Serious natural heart disfigurements generally are noticed soon after birth or during the first many months of life. Signs and symptoms could include:

- Pale grayish or blue lips, tongue or fingernails (cyanosis)
- Rapid breathing
- Lump in the legs, belly or areas around the eyes
- Briefness of breath during feedings, leading to poor weight
- Less-serious natural heart disfigurements may not be diagnosed until latterly in childhood. Signs and symptoms of natural heart defects in aged children may include
- Fluently getting short of breath during exercise or exertion
- Fluently tiring during exercise or exertion
- Fainting during exercise or exertion
- · Lump in the hands, ankles or bases
- When to see a doctor

Serious natural heart defects are frequently diagnosed before or soon after your child are born. However, call your health care provider, if you notice that your baby has any of the signs or symptoms over. Still, call your child's care provider, if your child has any of the signs or symptoms of less-serious heart blights as he or she grows. Your child's provider can let you know if your child's symptoms are due to a heart disfigurement or another medical condition.

#### Causes

- Chambers and valves of the heart
- Chambers and valves of the heart open pop-up dialog box
- To understand the causes of natural heart defects, it may be helpful to know how the heart generally works.
- The heart is divided into four chambers, two on the right and two on the leftism. To pump blood throughout the body, the heart uses its left and right sides for different tasks.
- The right side of the heart moves blood to the lungs through the lung (pulmonary) arteries. In the lungs, blood picks up oxygen also returns to the heart's left side through the pulmonary veins. The left side of the heart also pumps the blood through the body's main artery (aorta) and out to the rest of the body.

## How natural heart blights develop

During the first six weeks of gestation, the baby's heart begins to form and starts beating. The major blood vessels that run to and from the heart also begin to develop during this critical time.

It's at this point in a baby's development that natural heart blights may begin to develop. Experimenters are not sure exactly what causes utmost of these blights, but they suppose genetics, certain medical conditions, some specifics, and environmental or life factors, similar as smoking, may play a part.

There are numerous different types of natural heart disfigurements. They fall into the general orders described below.

Altered connections in the heart or blood vessels. Altered connections allow blood to inflow where it generally wouldn't. Holes in the walls between heart chambers are one illustration of this type of natural heart disfigurement. An altered connection can make oxygen-poor blood to blend with oxygen-rich blood. This lowers the quantity of oxygen transferred through the body. The change in blood inflow forces the heart and lungs to work harder.

Types of altered connections in the heart or blood vessels include

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Atrial septal disfigurement is a hole between the upper heart chambers (atria).

Ventricular septal disfigurement is a hole in the wall between the right and left lower heart chambers (ventricles).

Patent ductus arteriosus (PAY-tunt DUK-tus ahr-teer-e-O-sus) is a connection between the lung roadway and the body's main roadway (aorta). It's open while a baby is growing in the womb, and generally closes a many hours after birth. But in some babies, it stays open, causing incorrect blood inflow between the two highways.

Total or partial anomalous pulmonary venous connection occurs when all or some of the blood vessels from the lungs (pulmonary modes) attach to a wrong area or areas of the heart.

#### Natural heart valve problems

Heart valves are like doorways between the heart chambers and the blood vessels. Heart valves open and close to keep blood moving in the proper direction. However, blood cannot flow easily, if the heart valves cannot open and close rightly.

Heart valve problems include faucets that are narrowed and do not open fully (stenosis) or valves that do not close fully (regurgitation).

#### Exemplifications of natural heart stopcock problems include

Aortic stenosis (stuh-NO-sis): A baby may be born with an aortic valve that has one or two gate flaps (cusps) rather of three. This creates a small, narrowed opening for blood to pass through. The heart must work harder to pump blood through the valve. Ultimately, this leads to enlarging of the heart and thickening of the heart muscle.

**Pulmonary stenosis**: A disfigurement on or near the pulmonary valve narrows the pulmonary valve opening and slows the blood inflow.

**Ebstein anomaly**: The tricuspid valve which is located between the right upper heart chamber (patio) and the right lower chamber (ventricle) is deformed and frequently leaks.

### Combination of natural heart defects

Some babies are born with several natural heart deformities that affect the structure and function of the heart. Veritably complex heart problems may cause significant changes in blood inflow or uninhabited heart chambers.

- For illustration, tetralogy of Fallout (teh-TRAL-uh-jee of fuh-LOW) is a combination of four natural heart defects
- A hole in the wall between the heart's lower chambers (ventricles)
- A narrowed passage between the right ventricle and pulmonary roadway
- A shift in the connection of the aorta to the heart
- Thickened muscle in the right ventricle
- Other cases of complex natural heart defects are

**Pulmonary atresia**: The valve that lets blood out of the heart to go to the lungs (pulmonary valve) is not formed rightly. Blood cannot travel its usual route to get oxygen from the lungs.

Tricuspid atresia: The tricuspid stopcock is not formed. Rather, there is solid towel between the right upper heart chamber (atrium) and the right lower chamber (ventricle). This natural heart disfigurement restricts blood inflow and causes the right ventricle to be underdeveloped. Transposition of the great highways. In this serious, rare natural heart disfigurement, the two main highways leaving the heart are reversed (transposed). There are two types. Complete transposition of the great highways is generally noticed during gestation or soon after birth. Levo-transposition of the great highways (L-TGA) is less common. Symptoms may not be noticed right down.

Hypoplastic left heart pattern: A major part of the heart fails to develop duly. In hypoplastic left heart pattern, the left side of the heart hasn't developed enough to effectively pump enough blood to the body.

#### Threat factors

Utmost natural heart blights affect from changes that do beforehand as the baby's heart is developing before birth. The exact cause of utmost natural heart blights is unknown, but some threat factors have been linked. Threat factors for natural heart blights include

**Rubella** (German measles): Having rubella during gestation can beget problems in a baby's heart development. A blood test done before gestation can determine if you are vulnerable to rubella. A vaccine is available for those who are not vulnerable.

**Diabetes:** Careful control of blood sugar ahead and during pregnancy can reduce the threat of natural heart blights in the baby. Diabetes that develops during gestation (gravid diabetes) generally does not increase a baby's threat of heart blights.

**Specifics:** Certain specifics taken during gestation may beget birth disfigurements, including natural heart disfigurements. Give your health care provider a complete list of specifics you take ahead trying to come pregnant.

Specifics known to increase the threat of natural heart disfigurements include thalidomide (Thalamic), Angiotensin Converting Enzyme (ACE) inhibitors, statins, the acne drug isotretinoin (Myorisan, Zenatane, others), some epilepsy medicines and certain anxiety medicines.

**Drinking alcohol during gestation**: Drinking alcohol during gestation increases the threat of natural heart disfigurements. Quit, if you bomb. Smoking during gestation increases the threat of a natural heart disfigurement in the baby.

Family history and genetics: Natural heart blights occasionally run in families (are inherited) and may be associated with an inheritable pattern. Numerous children with a redundant 21<sup>st</sup> chromosome (down pattern) have natural heart blights. A missing piece (omission) of inheritable material on chromosome 22 also causes heart defects.

## **CONCLUSION**

## Complications

Implicit complications of a natural heart disfigurement include

Congestive heart failure: This serious complication may develop in babies who have a significant heart disfigurement. Signs of congestive heart failure include rapid-fire breathing, frequently with heaving breaths, and poor weight gain.

**Heart infections**: Natural heart blights can increase the threat of infection of the heart towel (endocarditis), which can lead to new heart stopcock problems.

Irregular heart measures (arrhythmias). A natural heart disfigurement or scarring from heart surgery may beget changes in the heart's meter.

Slower growth and development (experimental detainments): Children with more-serious natural heart blights frequently develop and grow more slowly than do children who do not have heart blights. They may be lower than other children of the same age. However, a child may learn to walk and talk latterly than other children, if the nervous system has been affected.

**Stroke**: Although uncommon, some children with natural heart disfigurements are at increased threat of stroke due to blood clots traveling through a hole in the heart and on to the brain.

Mental health diseases: Some children with natural heart disfigurements may develop anxiety or stress because of experimental detainments, exertion restrictions or learning difficulties. Talk to your child's provider if you are concerned about your child's internal health.