COMMENTARY

Congenital heart disease: Types, causes, signs and symptoms

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DESCRIPTION

In today's world congenital heart disease is known to be the most prominent heart disease from which number of people is losing their life. This disease is known to be the one or more cardiac structure related problems that exist since birth. The word itself denotes that congenital means a person is born with congenital defects which include defects in the walls of the heart, the valves of the heart, arteries and veins near the heart. These defects can disrupt the normal flow of the blood through heart. Due to this the flow of the blood can be slow down, go in the wrong direction or to the wrong place, or can be blocked completely. Congenital heart disease also called as Congenital Heart Defects (CHD) can vary from mild (such as a small hole in the heart) to severe (such as missing or poorly formed parts of the heart). Sometimes, about 1 in 4 babies with a heart defect some babies may be born with critical congenital heart defect. Babies who are born with these critical CHD need surgery or other procedures in their first year of life.

Signs and symptoms

The signs and symptoms of CHD have a range of symptoms as the condition refers to several different types of cardiac defects. The common or general signs and symptoms includes a blue tinge to the skin or lips called as cyanosis, rapid breathing, rapid heartbeat, swelling of legs, tummy around the eyes, shortness of breath (SOB) in babies while feeding which makes them difficult to gain weight, while in older children and in adults SOB can be find while doing exercise, sign of fatigue and extreme tiredness, sometimes fainting, and swelling of hands, ankles or feet.

Causes

CHD is caused when something disrupts the normal development of the heart. From most of the studies it is found that most of the CHD cases occur when something affects the heart's development during the first trimester of pregnancy, where heart develops from a simple tube like structure into a shape more like a fully formed heart. Genetic conditions, maternal diabetes, alcohol, rubella, flu, medications, phenylketonuria etc., are known to be the some of the causes for developing increased risk for the development of heart defects.

Genetic conditions: As from most of the studies it is the basic point that several genetic health conditions can be inherited to the baby from one or both parents. Down syndrome, turner syndrome and noonan syndrome are some genetic disorders that can cause CHD.

Maternal diabetes: Women with diabetes especially type 1 Diabetes Mellitus have a greater risk of developing heart defects in the fetus.

Alcohol: If pregnant women drinks too much of alcohol during her gestational period, it can have poisonous effect on the tissue of the fetus called fetal alcohol syndrome. It is common for the children with this syndrome to have CHD most often, ventricular or atrial septal defects.

Rubella: It is a viral infectious disease which is not that much serious in case of adults or children, but it can severely affect unborn baby if a mother develops rubella infection during the first 8 to 10 weeks of pregnancy. This infection causes multiple defects in the fetus one such is CHD.

Medication: Certain class of drugs such as ant-seizure, acne medicines, and ibuprofen can cause CHD in children.

Types of congenital heart disease

As there are many types of CHD, they are divided into three main categories.

Heart valves defects: The valve present inside the heart which directs the blood flow may close up or leak. This interferes the heart's ability to pump blood correctly.

Heart wall defects: Natural walls present between the left and right sides and the upper and lower chambers of the heart may not develop correctly, which causes blood to be pumped back into the heart, thereby puts pressure on heart to work hard resulting in high blood pressure.

Blood vessel defects: The blood vessels such as arteries and veins that carry blood to the heart and back out to the body may not function properly thereby leading to reduced or block the blood flow leading to complications.

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