

Heart Hole- An Abnormal Birth Defect

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ABSTRACT

Heart hole defect is very common among newborns, it is due to structural abnormalities of the heart. Congenital means present from birth and affects almost in 100 newly born. Some Congenital heart diseases are lethal if not treated and some congenital heart diseases do not need any treatment. There are many forms of congenital heart disease such as arterial septal defects (ASD) and ventricular septal defects (VSD). These defects are usually diagnosed after a baby is born. The size of the ventricular/arterial defects may cause shortness of breath and tiredness. This present study focuses on understanding in detail congenital heart diseases their effects and their severity.

Keywords: Heart, Septum, ASD, VSD, Babies, Congenital, Chamber, Holes, Ventricular.

Journal of Applied Pharmaceutical Sciences and Research, (2023); DOI: 10.31069/japsr.v6i3.02

INTRODUCTION

Congenital Heart defects or holes in the heart is considered as a defect by birth in the heart. The main problem regarding this effect is related to the heart and its various parts at the time of birth of newborns. These effects are very dangerous and can alter the flow of blood in the heart and various parts of the body. It abnormal the normal effect of the heart. The defects of the heart are of many types but arterial septal defect mainly called as ASD is a kind of hole that is present in between to upper chambers of our heart. This defect usually occurs at birth so-called as congenital. Sometimes the hole is small and do not cause any problems in the future. But sometimes newborn with ASD have a big hole and they can cause various health issues in future, even though ASD sometimes show no signs or symptoms or even a clue. Regarding the structure of the heart, the heart is mainly divided in to 4 main chambers, the upper and lower chambers, as we know the heart supplies blood to our whole body and the heart uses its different chambers to do this work. Defects in heart are common nowadays any clear cause. Genes and our environment play a huge role in these defects Anatomy of normal heart and with septal defects are shown in Figure 1.¹

There are various types of ASD, Such as:

- Defect in the middle wall of the heart
 - Defect in the lower part of the arterial septum
 - Defect in the upper part of the arterial septum
 - A defect that occurs between the coronary sinus, Which is the main part of the venous system of the heart.¹
- Another defect known as Ventricular septum defect (VSD) is actually a known hole in the heart. Which is also one of the congenital heart defects at the time of birth. This causes abnormal and unusual openings in the wall of the heart. Which is considered as most common heart defect. Which is sometimes diagnosed easily and can be cured.² Right and left ventricles as separated by a wall known as ventricular septum. Newborns with VSD have an opening in the heart that act as a hole and alters the flow of blood mainly O₂-rich blood to the lungs.² ASD

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How to cite this article: Sharma A, Sharma S, Sharma MC. Heart Hole- An Abnormal Birth Defect. *Journal of Applied Pharmaceutical Sciences and Research*. 2023; 6(3):8-9

Source of support: Nil

Conflict of interest: None

Received: 08/08/2023; **Accepted:** 05/09/2023; **Published:** 05/12/2023

along with VSD causes problems in newborns and play a huge role in the flow of O₂ rich and oxygen Poor blood and the passage of blood between lungs and body also get effected due to these defects.³

A newborn with VSD have a single or more than a single hole in the wall of the heart. These defects occur by their own or due to some congenital defects. VSD may be too small in nature or big enough.³ Small size VSD do not cause much problems but large VSDs interfere with the low of blood and even they block the ways of various arteries and veins. Small-size VSDs get close on their own. But large VSD are complicated. Babies with VSD, ASD are any other

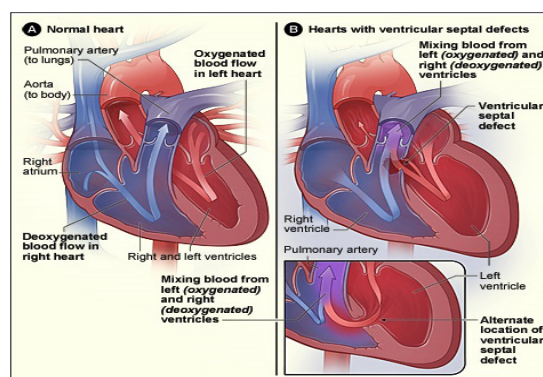


Figure 1: Heart Defects

heart defect are very much delegated to handle and their mothers also don't have any ideas regarding these defects. The development of these heart defect are sometimes not known. The unusual murmuring of the heart is the very first sign of this defect. This murmuring sound is also sometimes observed during 6 to 8 weeks of childbirth.⁴

Defect Diagnosed

- Firstly it was diagnosed via physical tests and procedures.
- Some holes close themselves.
- Big holes required surgery.⁵

Holes in the heart are the common problem babies are usually born with. Some defects are minor and some defects are major in nature. Some require medical attention and some vanish at on. The problem mainly depends upon size of the hole. These holes alter the flow of flood in the heart. Sometimes the symptoms are notable and sometimes there are no symptoms.⁶⁻⁷ The various symptoms if observed are excessive sweating easily tired not putting weight and chest infection.⁸ Large whole requires open heart surgery or a cardiac catheterization using a device inserting procedure in to the opening to plug it. The surgery can be possible during early childhood and it does not cause any symptoms.⁹⁻¹⁰ These defects should be cured on time to avoid any kind of complication and issues in the future. Many defects can be sewn close without using any kind of patch.¹¹

CONCLUSION AND DISCUSSION

A hole in the heart is a non-medical term used for a congenital defect in the heart. There are many types of holes in the heart and most are present from birth. Almost 7 out of 10 newborns is a hole in the heart that survive into adulthood. A congenital heart defect is a common form of heart disease. These types of abnormalities can obstruct blood flow in the heart are nearby vessels, or it may cause blood to flow to the heart irregularly. Children who undergo treatment for CSD should continue to have follow up throughout adulthood. The hole in the heart is may be due to genetic or environmental factors and sometimes the reason is unknown. So it must be treated on time to avoid unusual happenings in future.

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