Congenital/childhood heart disease

Congenital / childhood heart disease (CHD) is a general term for a range of conditions that affect the normal workings of the heart.

Congenital / childhood heart disease can be present at birth (congenital) or acquired during childhood.

A normal heart has two upper and two lower chambers. The upper chambers, the right and left atria, receive incoming blood. The lower chambers, the more muscular right and left ventricles, pump blood out of your heart. The heart valves, which keep blood flowing in the right direction, are gates at the chamber (Mayo Clinic, 2017).

The right side of the heart receives deoxygenated blood from the body, the right side of the heart is coloured blue on the diagram below. From the right lower chambers the blood is pumped into the lungs where it gets oxygen. From the lungs the blood enters the left side of the heart and is pumped to the rest of the body.

The image right, shows the path of the blood as it travels through a normal heart.

Congenital heart defects

A congenital (present at birth) heart defect occurs when a child is born with a heart problem. A defect occurs when the heart and blood vessels don't develop properly before birth. The passage of blood inside the heart or vessels may be blocked, the blood may travel abnormally through the heart, or parts of the heart itself may be underdeveloped.

Congenital heart defects are the most common types of birth defects, affecting 1 in 100 babies (Heart Centre for Children, 2017). In Australia, 8 babies are born each week with some form of congenital heart defect (Leggat, 2011). Some defects are mild and cause no significant disturbance to the way the heart functions. However, more than half of all children with a heart defect have a condition that is serious enough to require treatment (Leggat, 2011).

The causes of congenital heart defects are largely unknown, in fact in around eight out of 10 cause of the defect is unknown (Better Health Victoria, 2014). Some of the known causes are due to a combination of the many factors such as genetics and environment (Better Health Victoria, 2014).
• Ventricular septal defect
• Transposition of the great vessels
• Coarctation of aorta
• Tetralogy of Fallot
• Hypoplastic left heart syndrome.

Acquired heart Defects

An acquired heart defect occurs when a child acquires a heart problem after an illness. Illnesses that can lead to a heart problem include myocarditis (inflammation of the heart muscle), cardiomyopathy (disease of the heart muscle), rheumatic heart disease (a disease that may follow streptococcal bacterial infection) and Kawasaki disease (a disease with fever, rash and swollen lymph glands that may affect the heart). These are called acquired heart disorders.

Aboriginal and Torres Strait Islander People

Congenital / childhood heart disease is more common among Aboriginal and Torres Strait Islander people compared with non-Indigenous Australians, and Indigenous Australians are 2.6 times more likely to die from Congenital / childhood heart disease than other Australians (Leggat, 2011).

Many Aboriginal and Torres Strait Islander children who have rheumatic fever are not diagnosed or treated. Without treatment, rheumatic fever can lead to serious complications such as rheumatic heart disease. This is why acquired heart disease is more common among Aboriginal and Torres Strait Islander Australians compared with non-Indigenous Australians.

Facts: Congenital / childhood heart disease

• Congenital / childhood heart disease is the leading cause of death in infants less than one year old in Australia
• Every week, there are five deaths due to Congenital / childhood heart disease
• There is no known way to prevent Congenital / childhood heart disease; the causes of heart defects are complex and largely unknown
• Currently, there is no cure for Congenital / childhood heart disease
• The treatment of Congenital / childhood heart disease is improving. About 90% of children with Congenital / childhood heart disease will survive into adulthood

Around 64,000 children, young people and adults are currently living with a childhood heart condition (Leggat, 2011)

Where can I go for further help?

People with Congenital / childhood heart disease face unique challenges, treatment and often repeated surgeries for their entire lives, and support is critical at every stage of the journey – from when Congenital / childhood heart disease is diagnosed through childhood, the teenage years and into adulthood.

HeartKids Australia is a national charity dedicated to supporting people affected by Congenital / childhood heart disease. HeartKids provides practical and emotional support to people with Congenital / childhood heart disease and their families.

For more information visit: www.heartkids.org.au
Or Phone the HeartKids InfoLine: 1800 432 785

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References

