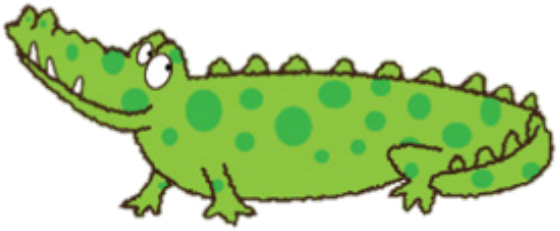
DOWN SYNDOME & CONGENITAL HEART DEFECTS

Logan's Foundation

WHY IS DOWN SYNDROME ASSOCIATED WITH HEART DEFECTS?

Although the link between Down Syndrome and heart defects is well-known, the cause of the heart defect isn't clear. Genetics, and the extra 21st chromosome that children with Down Syndrome have, is likely to play a part in the development of heart defects.

Some babies born with Down Syndrome will show symptoms of their heart condition at birth, whereas may not have any obvious symptoms at all.



WHAT ARE THE CONGENITAL HEART DEFECTS ASSOCIATED WITH DOWN SYNDROME?

There are a few different types of congenital heart defects that are associated with Down Syndrome:

Atrioventricular Septal Defect (AVSD)

This defect occurs when there is a hole between the right and left side of the heart. It either occurs as partial or complete and is a combination of defects that cause the defect in the centre of the heart.

Ventricular Septal Defect (VSD)

This defect occurs when there is a hole in the heart between the two lower chambers, or ventricles. The hole allows oxygen rich blood to move back into the lungs instead of being pumped around the body.

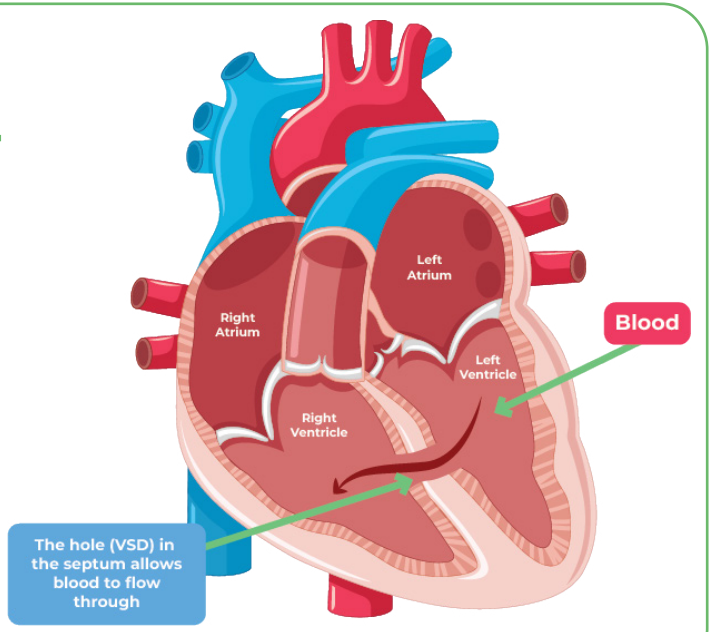
Persistent Ductus Arteriosus

The 'Ductus Arteriosus' is an opening between two major blood vessels in the heart. While the baby is in the womb, the Ductus Arteriosus diverts the blood away from the lungs and it usually closes straight after birth. If it doesn't, it is called 'persistent'.

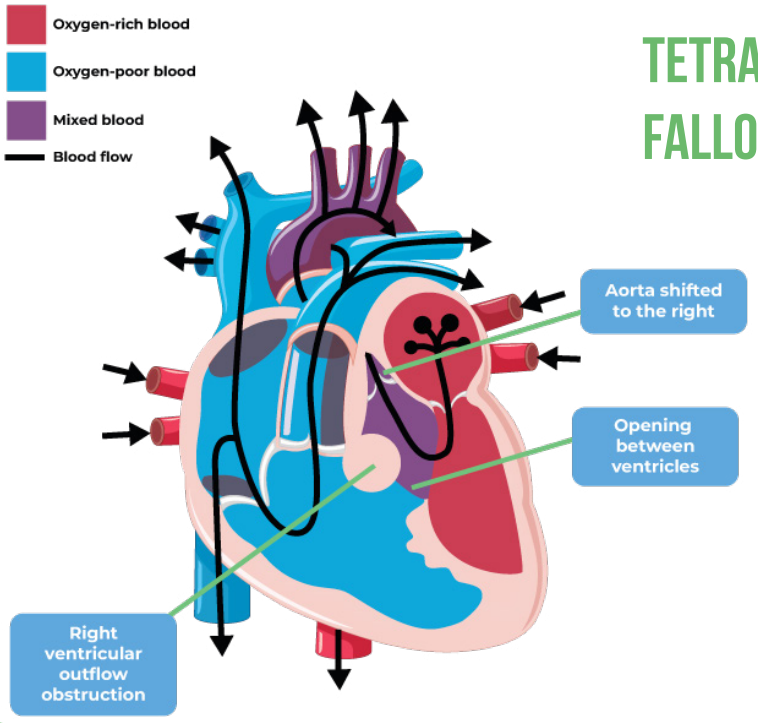
Tetralogy of Fallot

This condition is made up of four conditions:
-Ventricular Septal Defect
-Overriding aorta
-Pulmonary stenosis
-Right Ventricular Hypertrophy

VENTRICULAR SEPTAL DEFECT

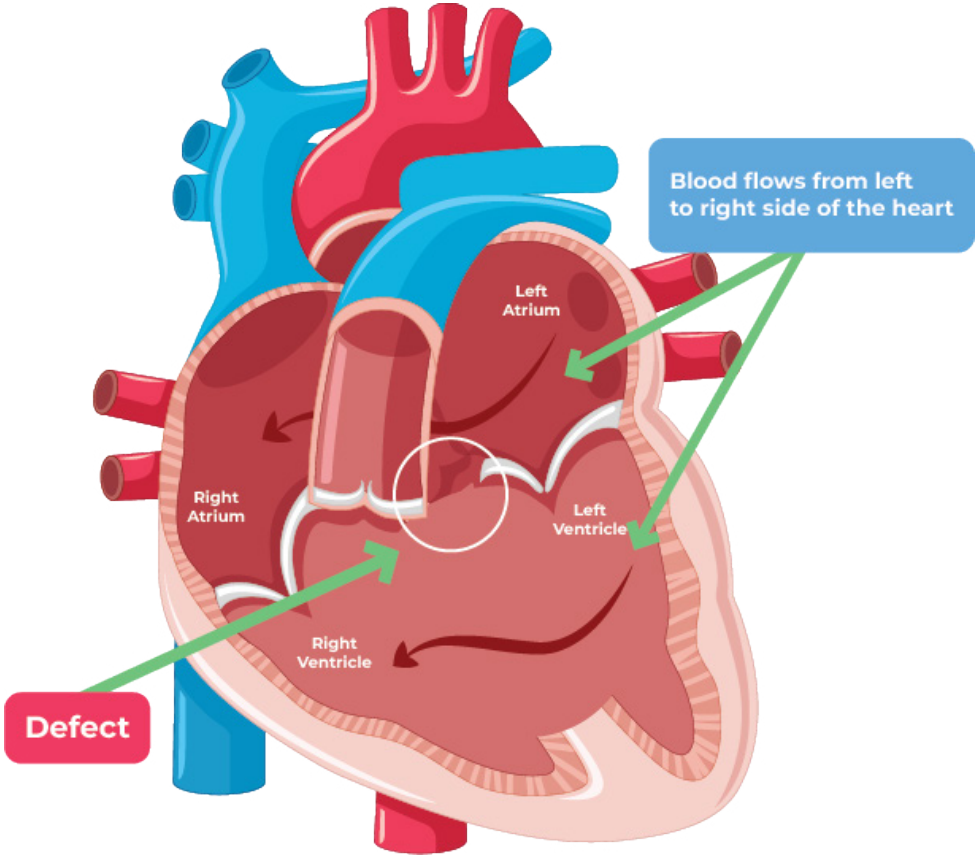


TETRALOGY OF FALLOT



AVSD is the common congenital heart defect associated with Down Syndrome.

The defect causes blood to flow where it normally shouldn't go as the hole allows blood in the heart to flow from the left to the right, causing increased blood to the lungs, thickened pulmonary arteries and even some smaller blood vessels closing in the lungs.

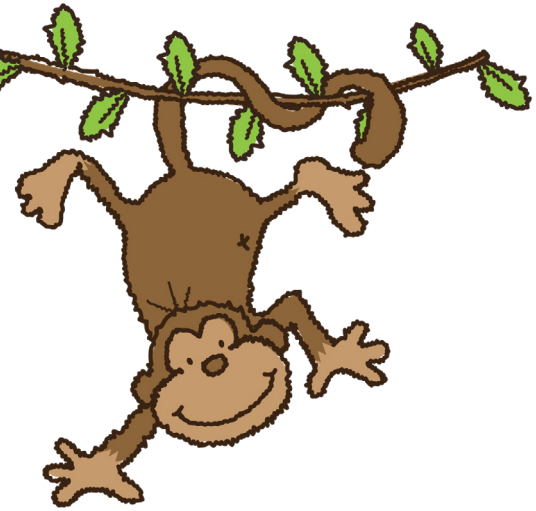


WHEN CAN A HEART DEFECT BE DETECTED IN A BABY WITH DOWN SYNDROME?

When a baby is tested during pregnancy for Down Syndrome, a foetal echocardiogram is used. This test can also show if a baby has a heart defect and thanks to new technology, the number of diagnoses before birth has increased.

However, some babies will not be diagnosed with Down Syndrome before they are born and so the heart defect will go unnoticed too.

If your baby is born with Down Syndrome, an echocardiogram will be used shortly after birth to check for any heart defects.



WHAT PARENTS SHOULD KNOW ABOUT DOWN SYNDROME AND CONGENITAL HEART DEFECTS

It is estimated that half of babies born with Down Syndrome will also have a heart defect. All children who are born with Down Syndrome must have a heart examination by six weeks to ensure if they need treatment, that it is prompt.

Treatment for a heart defect will depend on the type of condition your child has. Some may require early surgery, whilst others may need medication to close the hole if it is only small. Regardless of what size the hole is, timely diagnosis and treatment have led to significant improvements in the health and life expectancy of children born with Down Syndrome and heart defects.

Today, the outlook for babies born with Down Syndrome and a heart defect is really positive, with the vast majority of babies having treatable conditions that allow them to live happy lives.

LIFE EXPECTANCY OF DOWN SYNDROME CHILDREN WITH HEART DEFECTS

Timely diagnosis and treatment have led to significant improvements in the health and life expectancy of children born with Down Syndrome and heart defects.

Today, the outlook for babies born with Down Syndrome and a heart defect is really positive, with the vast majority of babies having treatable conditions that allow them to live happy lives.

Ongoing care for children with heart defects

When a child with Down Syndrome and a congenital heart defect grows, they will likely need ongoing care from a specialist cardiologist to ensure that any repairs from previous surgeries are still stable and that nothing has worsened.

MEDICAL TERMS & WHAT THEY MEAN

AORTA	The main artery of the heart that supplies oxygen-rich blood to the body.
ATRIA	Either of the two upper chambers in the heart.
ATRIUM	one of the two upper chambers of the heart.
CONGENITAL	Present from birth.
ECHOCARDIOGRAM	A scan to look at the heart and nearby blood vessels.
HEART MURMUR	A whoosing or rasping sound heard during a heartbeat.
VENTRICLE	One of the two lower chambers of the heart.

Respite and support of any kind is invaluable.

Lagan's Foundation, a Charitable Incorporated Organisation in England and Wales (1154208) aims to physically help support families who have infants and children up to 19 years old, diagnosed with complex health conditions specialising in heart defects and feeding difficulties. Lagan's Foundation's purpose is to provide unique at home and in hospital care to support parents in their caring role.

Flexspace, Office 16,
Manchester Rd,
Bolton BL3 2NZ

Charity Number
1154208
01204 800300
info@lagans.org.uk