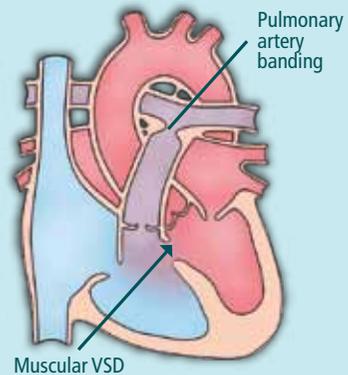


VSD



If an infant is very ill, or too small, or has more than one VSD or a VSD in an unusual location, a temporary operation to relieve symptoms and high pressure in the lungs may be needed. This procedure (pulmonary artery banding) narrows the pulmonary artery to reduce the blood flow to the lungs. When the child is older, an operation is done to remove the band and close the VSD with open-heart surgery.

WHAT WILL HAPPEN TO MY CHILD AFTER SURGERY?

The long term outcome after surgery is good. Sometimes, the child may need long term follow to look for uncommon problems, such as a leak in the aortic valve.



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WHAT HAPPENS
AFTER SURGERY?

Ventricular Septal Defect (VSD)

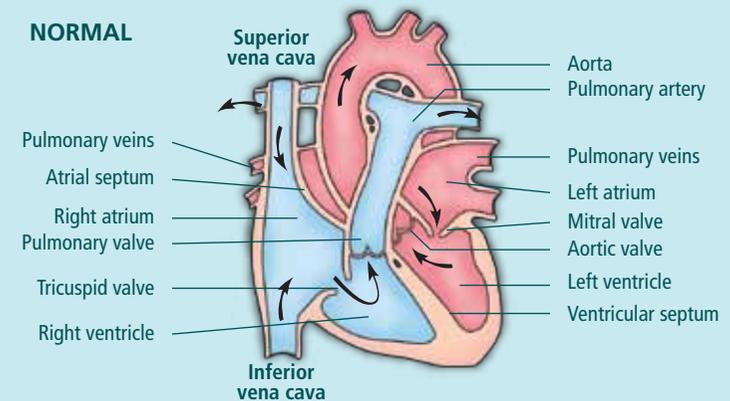
WHAT IS IT AND HOW DOES IT AFFECT THE HEART?

A VSD is a hole (defect) in the wall (septum) between the heart's two pumping chambers (ventricles).

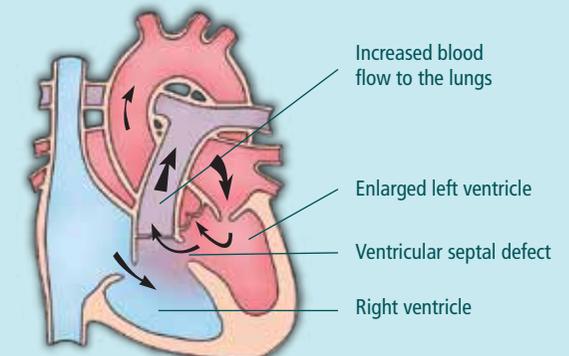
Blood flows across the hole from the left pumping chamber (left ventricle) to the right pumping chamber (right ventricle) and out into the lung arteries.

If the VSD is large, the extra blood being pumped into the lung arteries makes the heart and lungs work harder and the left heart gets enlarged and the lungs become congested.

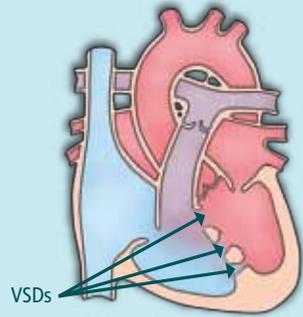
NORMAL



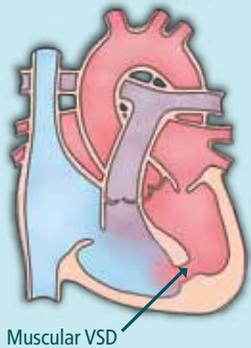
VENTRICULAR SEPTAL DEFECT



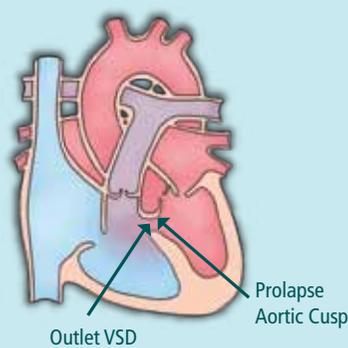
MULTIPLE VSDs



MUSCULAR VSD



VSD with PROLAPSE AORTIC CUSP



HOW WOULD THE VSD AFFECT MY CHILD?

If the hole is small, it may not cause any symptoms because the heart and lungs don't have to work harder. The only abnormal finding is a loud murmur.

If the hole is large, your child may develop symptoms few weeks after birth. The symptoms are breathing difficulty, trouble feeding and poor weight gain. These symptoms are due to excessive blood flow to the lungs.

WHAT WILL HAPPEN TO MY CHILD IF UNTREATED?

If the VSD is small, the children usually have no symptoms. However, if the VSD is located very near the aortic valve, over time the aortic valve will get distorted and starts to leak.

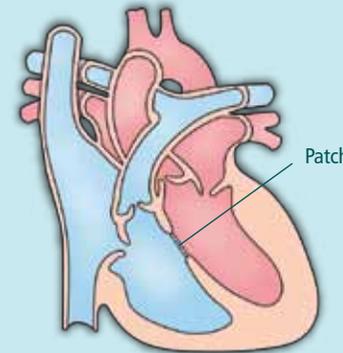
If the VSD is large, excessive blood flow to the left heart and lungs cause the heart and lungs work harder and high lung pressure. Overtime, this may cause permanent damage to the lung blood vessels.

HOW CAN IT BE TREATED?

If the opening is small, no intervention is needed as the heart and lungs don't work harder and small VSD may close on its own. Sometimes, surgical VSD closure is needed in small VSD with aortic valve distortion or aortic valve leakage.

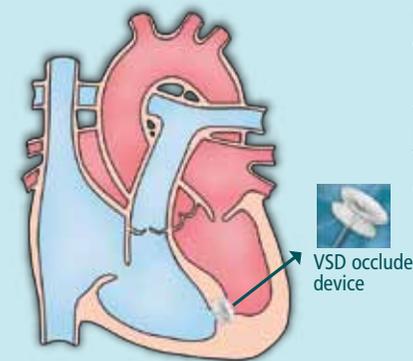
If the opening is large, open-heart surgery may be needed to close it early and prevent serious problems. Medicines may temporarily help to reduce the symptoms while waiting for surgery but they don't cure the VSD or prevent damage to the lung arteries.

CLOSURE BY PATCH



Surgical closure of VSD is done using a patch of fabric or pericardium (tissue covering the heart), or sometimes, it can be sewn directly without a patch.

MID MUSCULAR VSD



Certain type of VSD i.e. muscular VSD may be closed during cardiac catheterization using a device.

A VSD occluder device is placed in patients with muscular VSD, if the VSD cannot be closed by the surgeon due to its position.