

If you have any further questions, please contact your child's consultant via their secretary via the hospital switchboard.
0151 426 1600

The secretaries are available:
Monday to Friday 9.00 am to 5.00 pm

If you need to contact outside of these hours please phone:
Ward 3F 0151 430 1616

Atrial Septal Defect (ASD) 'Hole in the heart'

If you need this leaflet in a different language or accessible format
please speak to a member of staff who can arrange it for you.

اگر به این بروشور به زبان دیگر یا در قالب دسترسی بذرگ نیاز دارید،
لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formacie,
proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil,
vă rog să discutați cu un membru al personalului să se ocupe
de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式, 请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أخرى، أو بتنسيق
يسهل الوصول إليها، يرجى التحدث إلى أحد الموظفين لتقييم ذلك لك.

Whiston Hospital
Warrington Road,
Prescot, Merseyside, L35 5DR
Telephone: 0151 426 1600

St Helens Hospital
Marshalls Cross Road,
St Helens, Merseyside, WA9 3DA
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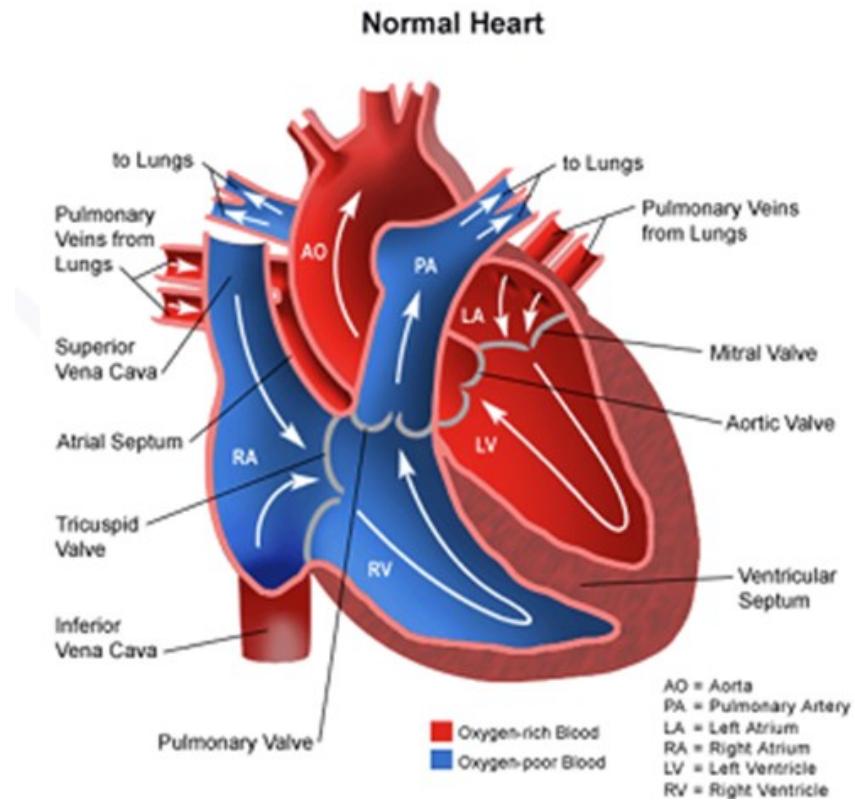
Southport Hospital
Town Lane, Kew,
Southport, Merseyside,
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Telephone: 01704 547 471

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Document Number: MWL2728
Version: 001
Review Date: 31/07/2028

The normal heart

The Heart is made up of four chambers: the upper two chambers are called the atrium and the lower two are known as ventricles. Muscular walls, called septum, divide the heart into two sides. On the right side of the heart, the right atrium and ventricle work to pump deoxygenated blood to the lungs; on the left side, the left atrium and ventricle combine to pump oxygenated blood to the body.



What about surgery?

The specialist in charge of your child's care may decide that it may be more appropriate for your child to have an elective repair of the (ASD) using open heart surgery.

The defect is usually closed either directly with a suture (stitch) or patched. If closed by a stitch. Your specialist will explain the operation in detail if an operation is needed.

If the mitral valve is involved, this is usually repaired with sutures (stitches) at the same time as the hole is closed and in this case antibiotic prophylaxis (preventative antibiotics) are required for life.

Living with an atrial septal defect

If you have a small or repaired ASD, you should be able to live a normal healthy life. Your doctor will let you know how often they need to see you to make sure your heart is healthy. It is really important to go to your follow-up appointments so your doctor can make sure you keep well.

Exercising

Your child should be able to exercise normally if you have a small or repaired ASD. However, you should still speak with your doctor when considering making big changes to your exercise routine. If your child has a bigger ASD or showing certain signs and symptoms, your doctor will be able to tell you what kind of exercise is safe for you.

Follow up appointments with a Cardiologist (heart specialist) will be required long term.

What are the signs and symptoms of ASD:

In most children, ASD causes no symptoms. A very large defect may allow so much blood flow through it to cause congestive heart failure with symptoms such as shortness of breath, the infant becoming easily tired and poor growth.

How is the diagnosis of ASD made?

Most often an atrial septal defect is diagnosed when a doctor hears a heart murmur during a chest examination. The murmur itself does not actually come from blood going across the hole, but rather from the pulmonary valve area because the heart is forcing an unusually large amount of blood through a normal sized valve. Hearing the murmur on a physical examination is the most common reason an ASD is suspected.

An Echocardiogram (a scan of the heart) is usually carried out to confirm the diagnosis. X-rays may show enlargement of the heart and an ECG (a heart tracing) may show evidence of thickening of the heart muscle.



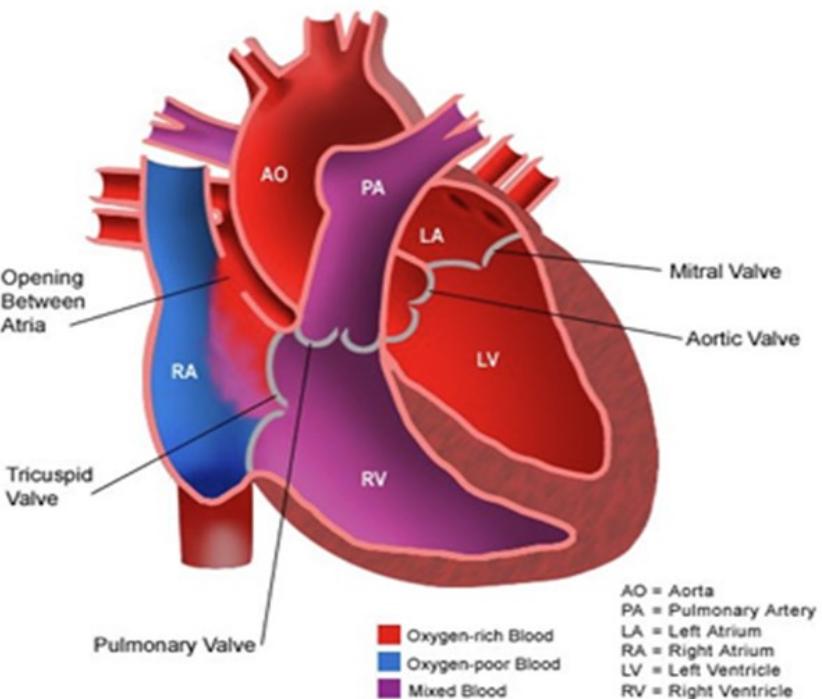
The usual form of treatment:

Small defects that allow a little blood to shunt from one side of the heart to the other often cause no problem. Such defects in the middle portion of the septum may close spontaneously in younger children. Moderate and large defects do not close, and the extra work on the heart over many years into adult life causes strain on the right side with enlargement of the receiving chamber and pump chamber. As a result of this the heart gets tired.

Atrial Septal Defect

The heart is divided into four separate chambers: The upper chambers, or atrium, are divided by a wall called the septum. An atrial septal defect (ASD) is a hole in the septum. ASD's are one of the commonest heart defects seen. 2 out of every 1,000 babies born will have an ASD. Girls are slightly more likely to have the problem than boys. When an ASD is present, blood flows through the hole primarily from the left atrium to the right atrium. This shunting increases the blood volume in the right atrium which means more blood flows through the lungs than would normally. If left untreated, the ASD may cause problems in adulthood. These problems may include pulmonary hypertension (which is high blood pressure in the lungs), congestive heart failure (which is weakening of the heart muscle), atrial arrhythmias (abnormal rhythms or beating of the heart) and an increased risk of stroke.

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Medicines are often used to treat heart problems and reduce symptoms:

Medicines are often used to treat heart problems and reduce symptoms. Many infants will not require any medications at all. For those who do, here are just a few of the more common drugs used.

It may be necessary for blood tests to be carried out on your infant/child from time to time if they are on certain types of medication. Your specialist will advise you if blood tests are required.

Frusemide & Hydrochlorothiazide:

These are diuretics (water medicine) which make the kidneys pass more urine. Infants and children on these drugs lose sodium, chloride and potassium (different salts in the blood stream) and water. When the heart is not working very well, water and salt accumulate in the body, liver and the lungs, making particularly the lungs rather heavy. When these drugs are given, the lungs become somewhat lighter, easier to expand and, less energy is used in breathing, thus helping the infant to breathe.

Spironolactone/Amiloride:

These are weaker diuretics (water medicine) which make the kidneys pass more urine. They hold on to potassium (salt) and are often used with other diuretics.

Captopril & Hydralazine

These drugs dilate (open) the blood vessels and as a result reduce blood pressure. They can be used to restore normal blood pressure. They can also be used in those infants and children with normal blood pressure and a weak heart. By reducing the blood pressure this reduces the work of the heart.

Propranolol

This reduces the rate and force of contraction of the heart muscle. It is useful in treating fast heart rates, high blood pressure and also relieving spasm of heart muscle with other more complicated heart problems.