

Atrial Septal Defect

Definition:

An Atrial Septal Defect (ASD) is a hole in the wall between the two atria (upper chambers of the heart).

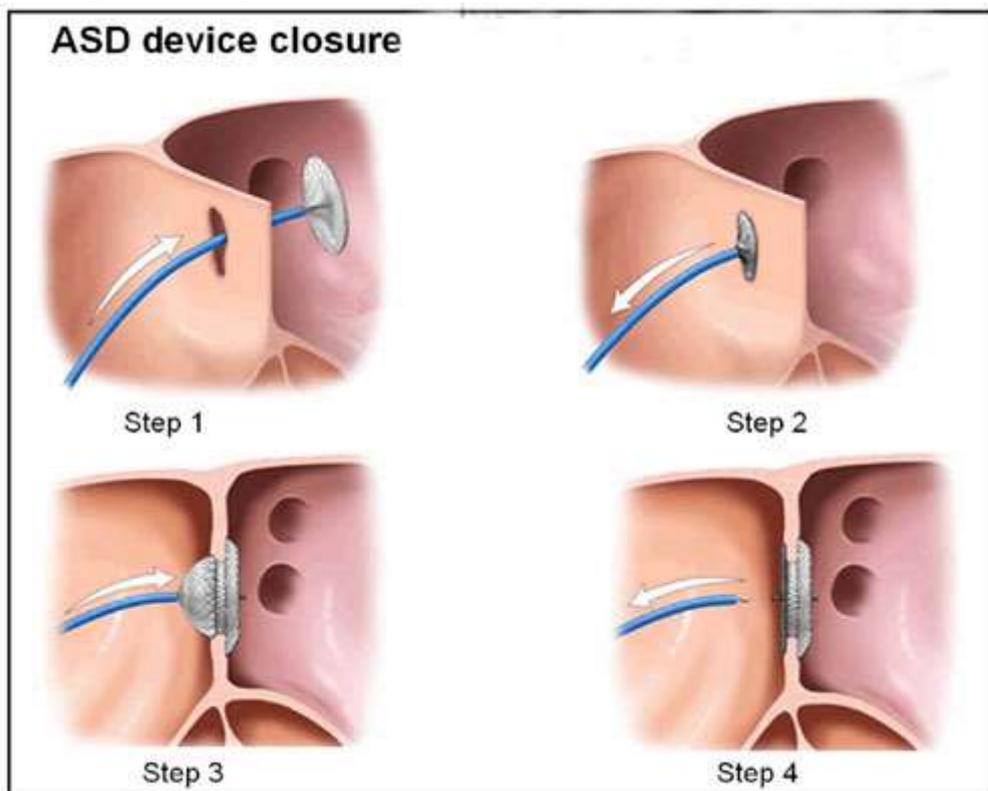
What Causes it:

At birth it is normal for there to be an opening between the 2 atria as part of the remains of the circulation of the baby inside the uterus. After birth however, the opening is no longer needed as the circulation becomes mature and so, the opening closes or becomes very small throughout the coming weeks or even months. An ASD occurs when the opening is either too large, or doesn't close.

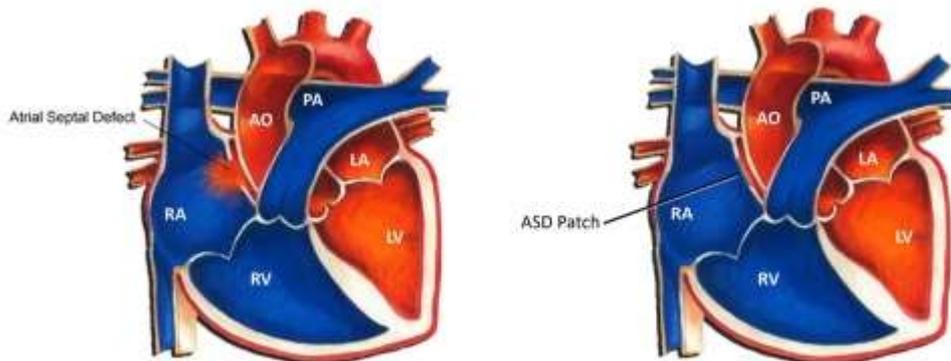
How does it Affect the Heart:

In a child with ASD, blood can move across the hole from the left upper heart chamber (left atrium) to the right upper chamber (right atrium) and out into the lung arteries. If the ASD is large, the extra blood being pumped into the lung arteries makes the heart and lungs work harder and the lung arteries can become gradually damaged. If the hole is small, it may not cause any symptoms. Many healthy adults still have a small opening in the wall between the upper chambers, sometimes called a Patent Foramen Ovale (PFO).

Management Options for ASD:



If the opening is small, and not causing any symptoms, often there is no need for treatment. If the opening is large, it can be closed via 2 ways, cardiac catheterization or open heart surgery. In cardiac catheterization, a device is inserted into the heart to 'plug' the opening. This will only work if the ASD is a basic and typical ASD (that is, not being in an unusual position or size, or not being associated with other defects). If it is a more complicated ASD, surgery is often the best solution. Closing a large ASD by open heart surgery usually is done in early childhood, even in patients with no complications (to prevent pulmonary hypertension that might happen later)



What activities can your child do?

In general, there will be some limiting of activities after the procedure or surgery, but in the long run, there should be no problems in living an active and healthy lifestyle with no limitations.

Following Up in the Future:

After the surgery or procedure, your pediatric cardiologist will need to regularly examine the child but after clearance from the cardiologist, a long term follow up will not be necessary.