SOOTHING YOUR TROUBLED HEART

In many cases, a hole in the heart may have no long-term effect on your child's health. Some instances allow defects to safely go untreated and smaller holes may even correct themselves as your grows up. However, it is always useful to follow up on a diagnosis and receive treatment for more serious cases. This can include regular doctor check-ups, occasional imaging examination and more advanced investigations to screen for potential complications. Be vigilant, and we at IJN want you to gain the upper-hand in an otherwise powerless situation.

Foetal Echocardiography

This test which is similar to an ultrasound in pregnancy is done to help detect foetal heart abnormalities. It is normally performed if the doctor identifies an abnormal heart rhythm or possible heart problem in an unborn baby of mothers who are in their second trimester as early as 16 weeks of pregnancy.

Receiving Your Diagnosis

Transthoracic Echocardiography (TTE)

TTE is the most common non-invasive type of echocardiogram. It is used to examine suspected problems with the heart's structure and functions. In order to do this, a transducer is placed on the patient's chest to provide clear images of the heart's valves and chambers.

Transoesophageal Echocardiography (TOE)

TOE is used to provide a more detailed and clear picture of the heart's structures. The transducer which uses sound waves is passed through the patient's mouth, through the throat and into the oesophagus, providing a better image of the inside of the heart. This procedure is usually for pre-operative and post-operative assessment, as well as guiding cardiologists during interventional procedures.

Angiogram

A catheter is inserted into a blood vessel, after which dye is injected into the catheter. The dye is visible by an X-ray machine which allows cardiologists to observe the inside of the blood vessels, and identify certain anatomy of the heart's structures. At the same time, multiple equipment are being utilised during the procedure to monitor your heart, blood pressure and amount of oxygen in the blood.

Getting The RIGHT Treatment

Children suffering from atrial septal defect (ASD), ventricular septal defect (VSD), atrio-ventricular septal defect (AVSD) and patent ductus arteriosus (PDA) require different types of treatment. With proper attention and change in lifestyle, children will be able to lead healthy and productive lives.

Atrial Septal Defect (ASD)

This defect can be closed via a transcatheter procedure, which is recommended for patients with a hole in the atrial septum. As the patient is anaesthetised, TOE is performed to confirm the type and size of the hole. The catheter is loaded with a device which is introduced through the femoral vein at the groin which travels to the defect in the heart and closes the hole without surgery. This procedure has a low risk of infection. ASD can also be closed surgically when indicated through an incision in the chest where the defect is sewn directly or closed using a patch.

Ventricular Septal Defect (VSD)

Moving further down the septum, a hole in the ventricular septum (VSD) often closes on its own if hole is small enough. If it is too large, then early surgery is necessary during infancy or childhood to prevent complications later on. Usually a patch of fabric or pericardium (the normal layer around the heart) is sewn over the VSD to close it completely, which is later covered by the normal lining tissue and becomes a permanent part of the heart. Selected types of VSD can also be closed via a transcatheter (non-surgical) procedure.

Patent Ductus Arteriosus (PDA)

Most of PDA heart defects are closed (occluded, in medical terms) via a transcatheter procedure. Occlusion involves a coil or device that is delivered via catheter to close the defect like a plug. Some patients may not be suitable for device occlusion. Surgical ligation of the PDA is done, which involves a left thoracotomy (incision in the chest wall). The ductus is ligated by tying it with suture (thread-like material) or by placing a small metal clip around the ductus.