After the procedure ...

No stitches are required, only a pressure bandage. You can leave the hospital some days after the procedure. The physician will prescribe the recommended medication. There will also be a recommended check-up scheme, mostly with the following intervals: 1st day after implantation, 1 month after implantation, 3 months after implantation and 6 months after implantation. Proper position of the device will be confirmed by Chest x-ray.

Things to think about after a procedure
• Take anticoagulant medication such as Aspirin, as recommended by physician
• Avoid physical strain for min. 2 weeks
• Have regular check-ups
• Carry a patient card

Medication necessary
Your physician will prescribe the medication pre-during and after the procedure, such as standard antibiotic & anti thrombotic (Heparin) medication. Also a Endocarditis Phrophylaxis is recommended for the first 6 month after Implantation.

Occluder and MRI
This device contains no magnetic parts. An MRI (3 Tesla) or any other conventional X-ray can be carried out immediately after the procedure.

Occluder and airport
The device will not set-off any metal detectors at an airport security scan.
1. **PDA defect**

The ductus arteriosus is a normal part of the circulation of the fetus. It is a blood vessel that connects the two large arteries coming out of the heart; the aorta and the pulmonary artery.

With the baby’s first breath, the lungs fill with air and become the source of oxygen for the newborn once the umbilical cord is cut. At that moment, the blood from the right ventricle changes course and begins to flow to the lungs. The ductus is no longer necessary for diverting blood from the lungs. Some blood from the aorta may cross the PDA to also help fill the lungs.

In some children, the ductus does not close or remains partially open. This is due to either an absence of the normal oxygen sensors in the ductus muscle or a weakness of the muscle which does not allow complete closure. When the ductus does not close within the first few days of life, it is called a persistently Patent Ductus Arteriosus (PDA). Patent means open.

2. **Closing the defect**

The closure is performed in a cardiac catheterization laboratory, a cath lab. A thin tube – a catheter – is inserted into the blood vessel in the groin and guided to the ductus. The size of the PDA is measured by fluoroscopy. The catheter is then exchanged for a larger catheter, the delivery sheath. The appropriate device, a PDA occluder, is pushed through to be placed across the defect through the delivery sheath.

Once the device is in the correct position and firmly attached to the aortic side. The physician will release the device and withdraw the delivery sheath.

3. **Device in position**

The device is now in the correct position and the defect is closed by the disc and the body of the device. After a few months the occluder will be covered by a thin layer of cells, then covered by the tissue of the heart and over time the defect should be completely overgrown.