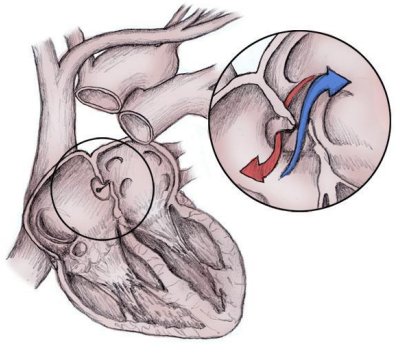
ASD / PFO CLOSURE

What is it?

ASD is known as Atrial Septal Defect, and PFO is known as Patent Foramen Ovale. Everyone is born with a small hole in the atria (upper chambers of the heart), which is supposed to close in the womb during gestation.

Atrial Septal Defect, or ASD, is one of the more common birth defects that present itself in adulthood. The atrial septum is a wall-like structure that splits the two upper chambers of the heart (atria). Patent Foramen Ovale, or PFO, is a flaplike opening that opens up in one of two locations in the atrial septum. These two defects in the heart wall are called congenital heart defects, meaning you are born with them. Both ASD and PFO patients are asymptomatic, and may go undiagnosed for years due to the subtle nature of the defects when your doctor is performing a physical examination.



A diagnosis of the ASD or PFO may arise when you see a cardiologist that requests an echocardiogram, or ultrasound of the heart, to be performed.

Who needs it?

ASD / PFO Closures are recommended if:

- You have an ASD or PFO that measures greater than 25mm in size
- You cannot be started on an anti-clotting treatment plan (warfarin, Coumadin, Xarelto, etc.)

What to expect before, during, and after?

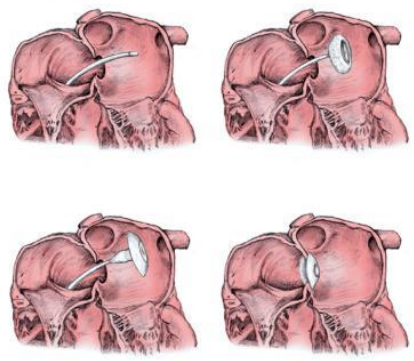
BEFORE

Prior to the scheduled procedure, you will be asked to come by the office to speak to us regarding how to best prepare. The doctor will explain the procedure to you in detail and review your most recent test results and lab work to see if any other precautionary steps are needed. You may need to make certain changes to your diet or medication regime. Direct instructions will be provided by our office. Since these procedures are performed in a hospital, it is best to make arrangements for a ride both to and from the hospital.

DURING

A thin tube, also known as a catheter, is passed through your femoral vein in your groin into your heart from below. Once inside of the heart, the doctor is able to thread the catheter from the right side of the heart into the left side and open the closure device like an umbrella, and fitting it snuggly into the ASD or PFO. An

echocardiogram will be used to see if the device has been well seated.



AFTER

Usually after the procedure is done, you will have to remain in the hospital for 24 to 48 hours for observation. An echocardiogram will be performed before your discharge just to make sure that there aren't any abnormalities present, such as something called pericardial effusion, or fluid around the heart sac. All patients are prescribed baby aspirins (81mg) to be taken lifelong, and repeat echocardiograms may be requested.

Are there any risks I should be aware of?

As with all procedures, there is a risk, but these rarely carry any serious adverse events.

Some complications include:

- Device-related clot formations
- Congestive heart failure
- Arrhythmias, or abnormal heart rhythms
- Residual shunting, or passage of blood through the atria
- Infection, bleeding, bruising at the catheter insertion site

The anti-clotting treatment plans tend to manage these complications fairly well.