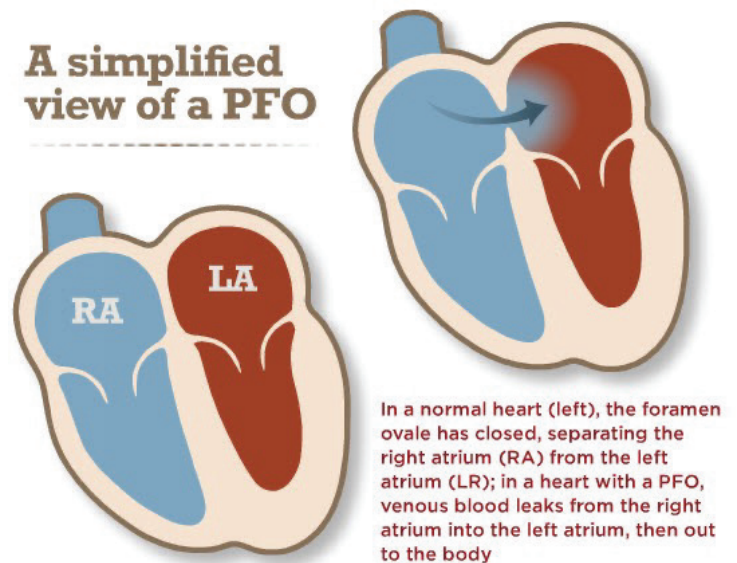


# Patent Foramen Ovale (PFO)

A hole in your heart would seem to be the very definition of a problem. Yet more than a quarter of people have one. And for most, it causes no adverse health effects. In fact, the vast majority of those affected don't even know it.

There are two kinds of holes in the heart. One is called an atrial septal defect (ASD), and the other is a **patent foramen ovale (PFO)**. Although both are holes in the wall of tissue (septum) between the left and right upper chambers of the heart (atria), their causes are quite different. An ASD is a failure of the septal tissue to form between the atria and is considered a congenital heart defect, something that you are born with. Generally, an ASD hole is larger than that of a PFO. The larger the hole, the more likely it is that there will be symptoms.

PFOs, on the other hand, can only occur after birth when the foramen ovale fails to close. The foramen ovale is a hole in the wall between the left and right atria of every human fetus. This hole allows blood to bypass the fetal lungs, which cannot work until they are exposed to air. When a newborn enters the world and takes its first breath, the foramen ovale closes. Within a few months, it has sealed completely in about 75% of people. When it remains open, it is called a patent foramen ovale (PFO). Patent is the medical term for open. For the vast majority of the millions of people with a PFO, it is not a problem and is considered a normal variation of the heart.



Because the PFO is considered a normal finding, no cardiology follow-up is necessary, unless a patient develops a blood clotting disorder or a heart disorder with a risk for stroke. In this situation, the PFO can provide a pathway for a blood clot to pass to the brain and cause a stroke.

Deep water scuba diving also carries a risk of stroke if a patient comes to the surface too quickly, causing bubbles to form in the bloodstream. For this reason, deep water scuba diving is not recommended for people who still have a PFO.

**We recommend cardiology follow-up and possible closure of the PFO in patients with a blood clotting disorder or risk of stroke.**