



PFO vs. ASD

Understanding Patent Foramen Ovale (PFO)
and Atrial Septal Defect (ASD)

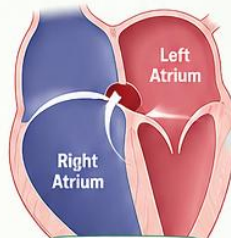


WHAT IS THE DIFFERENCE?



PATENT FORAMEN OVALE (PFO)

- A common normal variant.
- Present in approximately 25–30% of adults.
- Usually very small and causes little or no blood flow across the opening.
- Does not cause enlargement of the right side of the heart.
- Most individuals never develop symptoms.



PFO

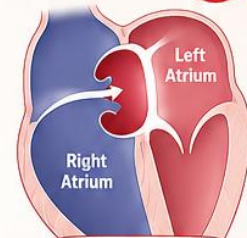
Flap opens normally when needed.

VS.

ATRIAL SEPTAL DEFECT (ASD)



- A true hole in the atrial septum.
- Often allows more blood flow from the left atrium to the right atrium.
- May lead to:
 - ♥ Right atrial enlargement
 - ♥ Right ventricular enlargement
 - ♥ Increased blood flow to the lungs
 - ♥ Long-term cardiac complications if significant

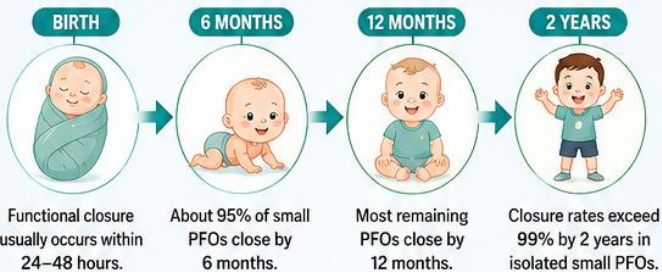


ASD

Hole allows more blood to pass through.

NATURAL HISTORY OF PFO

The foramen ovale is a normal fetal opening that allows blood to bypass the lungs before birth.



WHEN IS TREATMENT NEEDED?

FOR MOST CHILDREN:

- ✓ No medications
- ✓ No activity restrictions
- ✓ No intervention required



Observation alone is recommended.

CLOSURE IS GENERALLY CONSIDERED ONLY WHEN:

- Cryptogenic stroke occurs later in life
- Recurrent systemic embolic events occur
- Conditions increase the risk of paradoxical embolism



FACTORS FAVORING SPONTANEOUS CLOSURE

- ✓ Small size (<3 mm)
- ✓ Full-term birth
- ✓ Isolated PFO
- ✓ Well-developed flap valve



FACTORS ASSOCIATED WITH PERSISTENCE

- Larger defects (>3 mm)
- Prematurity
- Complex congenital heart disease
- Prenatal cardiac abnormalities



SPECIAL OCCUPATIONS REQUIRING ADDITIONAL EVALUATION

Individuals exposed to significant pressure changes may require specialized assessment:



In these settings, a PFO may increase the risk of:



Specialized diving and aerospace medicine guidelines may recommend further evaluation and, in selected cases, closure of the PFO.



KEY TAKE-HOME MESSAGE

A small isolated PFO is a common and usually benign finding.

Most close spontaneously during infancy, particularly within the first year of life. Persistent PFOs are common in healthy adults and rarely cause clinical problems.



Most children with an isolated PFO require no treatment, no restrictions, and have an excellent long-term prognosis.



Dr. Shabib Alhadheri, MD
Advanced Pediatric Cardiology



1478 W Elliot Rd, Suite 102
Gilbert, AZ 85233



Phone: 480-855-1339



Website: www.apcardio.com