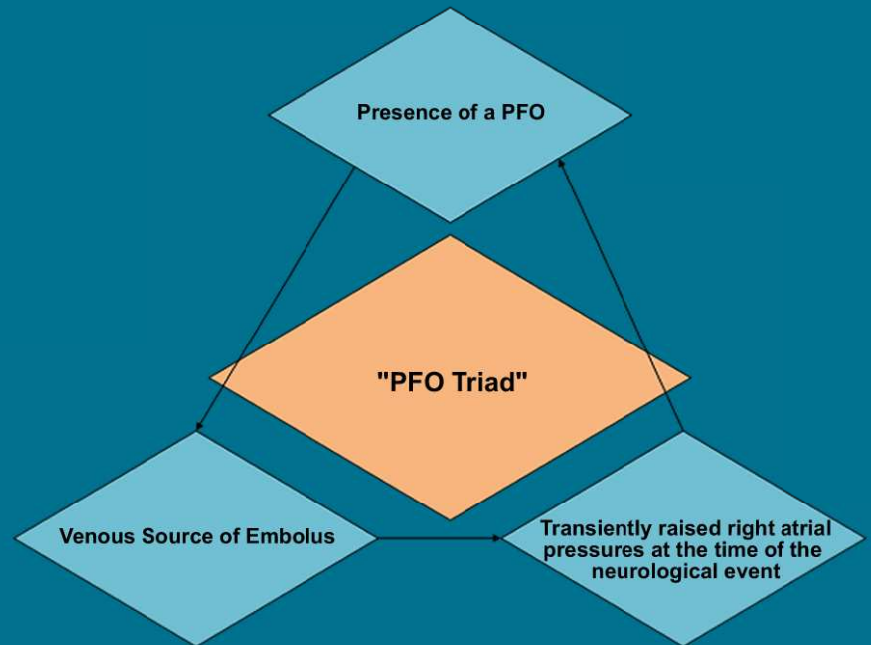


# GREENSLOPES PFO CLINIC INFORMATION SHEET

In utero the flap-like valve of the foramen ovale allows oxygenated blood to pass from the right atrium to the left atrium. At birth right atrial pressure falls below left atrial pressure resulting in apposition of the flap-like valve and cessation of atrial shunting. Permanent fusion of the foramen ovale occurs in ~75% of individuals in the first few years of life. The remaining 25% have a patent foramen ovale (PFO) that can transiently "open" when right atrial pressure exceeds left atrial pressure. Most PFOs are small but some are large, and potentially significant.

## CLINICAL SIGNIFICANCE

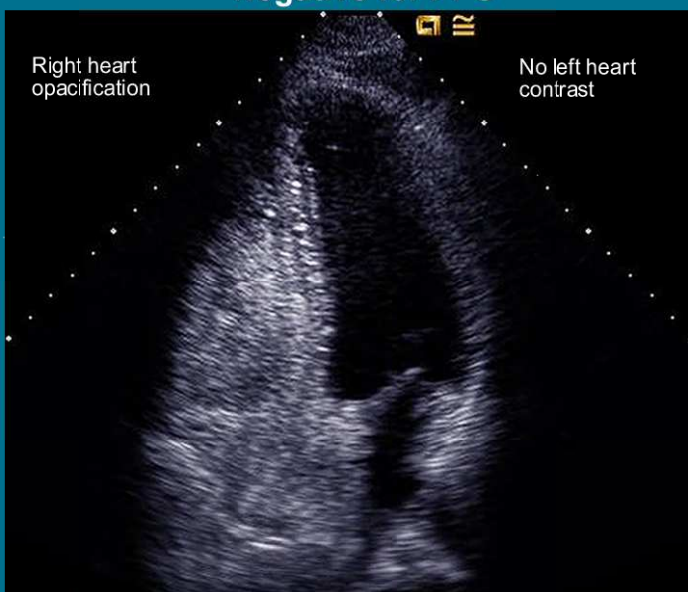
An incidental finding of PFO in asymptomatic patients is not clinically significant. However a PFO can be a significant finding in young patients with cryptogenic stroke, SCUBA divers with decompression sickness, and in some patients with migraine headaches. The likely mechanism is paradoxical embolism from the venous system through the PFO into the systemic circulation. This uncommon event is more likely to occur when the "PFO triad" is present:



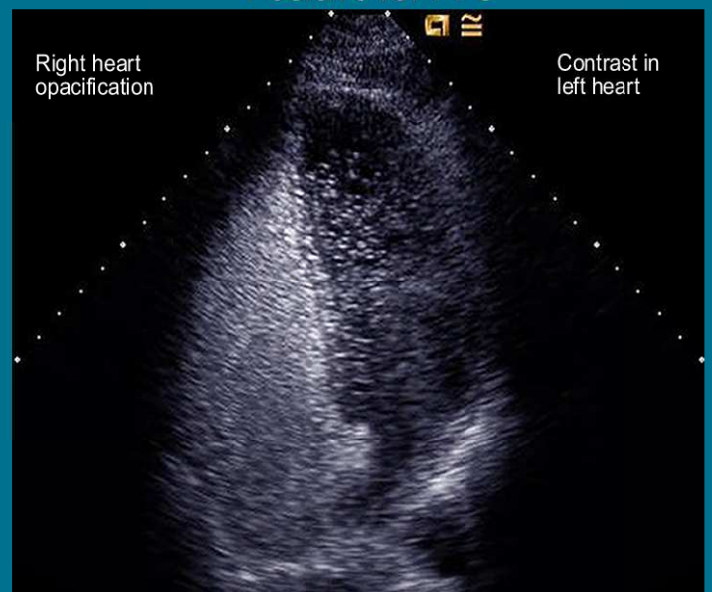
## PFO DIAGNOSIS

Evaluation for PFO is appropriate in patients with unexplained stroke or peripheral embolism, in SCUBA divers with the bends, and in some patients with severe migraines. Effective screening requires Agitated Saline Contrast imaging (ASCI) during an Echo +/-Transcranial Doppler study. These are very sensitive tests and a negative result rules out a significant PFO. If the result is positive and PFO closure is deemed clinically appropriate, a Transoesophageal Echocardiogram (TEE) is performed to assess suitability for percutaneous closure.

**Negative for PFO**



**Positive for PFO**



# GREENSLOPES PFO CLINIC INFORMATION SHEET

## TREATMENT

The main therapeutic options for significant PFO are medical (antiplatelet, anticoagulation), surgical closure, or more recently percutaneous closure. The latter is performed in the cardiac catheter laboratory, has low morbidity in experienced hands, and results in a low recurrence rate of thromboembolic events. Retrospective and registry data support the technique though definitive randomised prospective evidence is not yet available.



## PATIENT SELECTION FOR SCREENING

The following patient groups can be considered for PFO screening:

1. Post embolic event (CVA, TIA, peripheral) in patients with both
  - a. Absence of vascular disease in the symptomatic territory, and
  - b. Absence of other cardiac source for embolism eg AF
2. Symptomatic recreational or professional SCUBA divers
3. Severe migraine headaches refractory to other treatment

## PATIENT SELECTION FOR PFO CLOSURE

Patients with a positive screening study can be referred to the PFO Clinic for a consultation to determine suitability for PFO closure.