

Patent foramen ovale and closure of patent foramen ovale in patients with cryptogenic stroke

©Sandra Makarović*

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*ADDRESS FOR CORRESPONDENCE: Sandra Makarović, Klinički bolnički centar Osijek, Ul. Josipa Huttlera 4, HR-31000, Osijek, Croatia. / Phone: +385-31-511-511 / E-mail: sandramakarovic@yahoo.com

ORCID: Sandra Makarović, https://orcid.org/0000-0002-7487-1189

The patent foramen ovale (PFO) is a common anatomical variant in humans (prevalence 25%). Most common asymptomatic (incidental), it can be a cause of a paradoxical embolic stroke. A dedicated PFO occluder (*Amplatzer PFO Occluder*) was first used in 1997. Since, it has been used often as common and safe procedure. Three randomized studies (Randomized Evaluation of Recurrent Stroke Comparing PFO Closure to Established Current Standard of Care Treatment-RESPECT, Closure or medical therapy for cryptogenic stroke with patent foramen ovale-CLOSURE, Patent Foramen Ovale Closure or Antiplatelet Therapy for Cryptogenic Stroke-REDUCE), have proved its benefit for prevention of recurrent ischemic events (most commonly stroke), in patients without conventional stroke pathology. 1-3

We present a series of cases of young people, with cryptogenic stoke, PFO demonstrated on transesophageal echocardiography, using "bubbles" study, and successful transesophageal guided closure of PFO. Prior to PFO closure, a structured and systematic approach allows for a rapid and comprehensive echocardiographic assessment of the atrial septum. Good echocardiographic assessment of the atrial septal anatomy before closure is of paramount importance to allow the procedure to remain safe and effective.

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