PERCUTANEOUS TRANSCATHETER CLOSURE OF LEFT ATRIAL APPENDAGE IN A PATIENT WITH PATENT FORAMEN OVALE CLOSURE DEVICE

Background: Left atrial appendage closure (LAAC) device is approved as a substitute to anticoagulation in non-valvular atrial fibrillation (AF). A precise trans-septal puncture is required for optimal placement of the LAAC device, and a previous history of patent foramen ovale (PFO) closure device is considered as a relative contraindication to LAAC. We present a successful case of LAAC in a patient with the previous history of PFO closure.

Methods:
A 72-year-old female with a remote history of stroke, PFO closure using a 30 mm Amplatz cribiform device, and AF which was diagnosed after the PFO closure, was referred to our interventional clinic for elective LAAC after developing peptic ulcer disease while on anticoagulation. We utilized an intracardiac echo and fluoroscopy to find an ideal site for trans-septal puncture just inferior and posterior to the PFO device and placed a 27-mm Watchman device (WD). (Figure 1-A,B) A 6-week follow up trans-esophageal echocardiogram showed a well-seated WD with a nonsignificant 2mm peri-device leak, and her anticoagulation was discontinued.

Results: Using intracardiac echo and fluoroscopy, a trans-septal puncture can be safely performed in patients with previous history of PFO device.

Conclusion: LAAC can be performed in non-valvular AF patients with a history of PFO closure who are at high risk for thromboembolism and have a contraindication to anticoagulation. Prudent use of both preoperative and intraoperative imaging helps with the procedural success rate in LAAC.