Should we perform left atrial appendage closure in patients with high risk of stroke and atrial fibrillation who cannot take oral anticoagulants?

G. Chrysant
Cardiology, INTEGRIS Heart Hospital, USA

Patients with nonvalvular atrial fibrillation are at increased risk of thromboembolic events like stroke and require systemic anticoagulation. For patients with a high risk of bleeding or who have experienced clinically significant bleeding, left atrial appendage closure (LAAC) affords a roughly 90% reduction in stroke risk. The left atrial appendage can be ligated surgically, percutaneously, or can have the appendage filled with a nitinol based self-expanding device. The most notable and studied is the watchman device. The PROTECT-AF study, PREVAIL study and the ASAP study show noninferiority to warfarin and a good safety and efficacy profile. The ASAP trial demonstrated the safety and efficacy of LAA clocure with aspirin and Plavix without a warfarin transition. The patient population averaged a CHADS-VASc score of 2-3 and the vast majority (in some cases 90%) of patients had experienced clinically important bleeding. There is 5-year follow-up data further demonstrating safety and efficacy. Commercially, LAAC has been promoted as an alternative to warfarin therapy. Since the pivotal trials mentioned above, many patients with atrial fibrillation have been placed on novel oral anticoagulants that have been proven to be a safer alternative to warfarin as it pertains to bleeding events. There are no direct comparison trials between LAAC and novel oral anticoagulants; therefore, some important questions remain regarding who and how many patients should receive LAAC.