Conclusions: LAA closure with the WATCHMAN reduced bleeding compared with warfarin after post-procedural adjunctive therapy was completed. This should be considered in the overall risk-benefit analysis when selecting a strategy for stroke prevention in patients with AF.

TCT-174
Cardiac CT angiography is a useful non-invasive surveillance imaging test after percutaneous left atrial appendage closure

Jacqueline Saw1, Peggy Dejong1, Mathieu Lemperière2, Ken Gin3, John Jue4, John Mayo5, Savsar Nicalou6
1Vancouver General Hospital, Vancouver, BC, Canada, 2University of British Columbia, Vancouver, BC, Canada

Background: Left atrial appendage (LAA) device imaging after percutaneous closure for atrial fibrillation is important to assess for residual leak, device-associated thrombus, and device migration. Preclinical studies of novel devices have demonstrated their potential to non-invasively monitor these features. However, clinical studies are required to validate these findings. We report our pilot consecutive series of follow-up computed tomography angiography (CCTA) after LAA closure with the Amplatzer Cardiac Plug (ACP), Amulet, or Watchman devices, as part of the clinical development of these novel devices.

Methods: We report our pilot consecutive series of follow-up CCTA after LAA closure with the Amplatzer Cardiac Plug (ACP), Amulet, or Watchman devices, as part of the clinical development of these novel devices. Patients with successful LAA closure with the Amplatzer Cardiac Plug (ACP), Amulet, or Watchman devices were enrolled in a prospective, single-center registry. CCTA was performed at 1 month and then at 6-month intervals post-procedure for clinical surveillance in this series of patients. Prospective cardiac-gated CCTA were performed at 1 month and CCTA at 1-6 months post-procedure for clinical surveillance in this series of patients. Prospective cardiac-gated CCTA were performed at 1 month and CCTA at 1-6 months post-procedure for clinical surveillance in this series of patients. Prospective cardiac-gated CCTA were performed at 1 month and CCTA at 1-6 months post-procedure for clinical surveillance in this series of patients. Prospective cardiac-gated CCTA were performed at 1 month and CCTA at 1-6 months post-procedure for clinical surveillance in this series of patients.

Results: Twenty-five patients underwent CCTA at a mean of 157.1 ± 143 days following LAA closures (13 ACP, 8 Amulet, and 4 Watchman). Average age was 75.5 ± 9.8 years, and CHADS2 score was 3.2 ± 1.3. All patients had co-morbidities including hypertension, diabetes, and CHF. Of those, 24 patients had successful LAA closures. One patient had residual peri-device leak (TIAs: 0.5%). No other post-procedural complications were noted. Residual peri-device leak was noted in one patient, who was treated with dual antiplatelet therapy and oral anticoagulation with uninterrupted warfarin. No other complications were noted.

Conclusion: CCTA is a useful non-invasive imaging test for clinical surveillance after percutaneous LAA closure. Assessments of device position, atrial-thrombus, pericardial effusion, and residual patency into the LAA are well visualized on CCTA. However, residual LAA patency is seen frequently on CCTA, and device migration is possible. CCTA can be used to assess these features in real-time, and to guide future device development.