

Left Atrial Appendage Closure in Patients with Absolute Contra-Indications to Oral Anticoagulation

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Background: Stroke prevention by percutaneous left atrial appendage closure (LAAC) with the Watchman device (WD) has been shown to be an efficacious alternative to oral anticoagulation (OAC) in patients with non-valvular atrial fibrillation (NVAF). However, the feasibility and safety of LAAC with the WD in NVAF patients with absolute contra-indications to long-term OAC requires further definition.

Methods and results: From May to November 2010, LAAC with the WD was attempted in 12 patients with absolute contra-indications to long-term OAC. Clinical and echocardiographic follow-up was performed throughout hospitalization, at 6-week intervals thereafter, and is ongoing. Baseline clinical and procedural features are presented in the Table. All procedures were performed under general anesthesia with trans-esophageal echocardiography (TEE) guidance. Procedural success, defined as successful device implantation and a complication-free hospital course, was 92%. Peri-procedural anti-thrombotic therapy was individualized, and consisted in all subjects of aspirin or clopidogrel and a 6-week course of anticoagulation with either closely-monitored warfarin with or low-dose enoxaparin. Thereafter, anticoagulation was discontinued whereas aspirin and/or clopidogrel were continued. At 6-week follow-up, available in 10/12 patients, no serious adverse events were encountered. By TEE, device thrombosis was excluded and echocardiographic criteria for LAA occlusion were met in all patients.

Conclusion: In this series of elderly patients intolerant to warfarin, LAAC with the WD and an abbreviated course of anti-coagulation was achieved with high procedural success rates and without apparent safety concerns. Long-term follow-up with regard to late thromboembolic event rates continues.

Age (mean±SD)	76.7±6.9
Gender, male/female (n/n)	8/4
Persistent/Paroxysmal NVAF (n/n)	9/3
CHADS2 score, mean±SD	2.8±1.4
History of stroke or TIA (n)	5
Congestive heart failure or LVEF<40% (n)	1
Contraindication to long-term OAC	
Recurrent GI bleeding (n)	4
Recurrent GI bleeding (n)	2
Recurrent hematuria (n)	2
Intracranial bleeding (n)	3
Recurrent falls (n)	1
Seizure disorder (n)	1
Successful/Unsuccessful implant(n/n)	11/1
MACCE (n)	0