Long Term Use of Anticoagulation After Atrial Fibrillation Ablation

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Introduction: Although atrial fibrillation is strongly associated with death and disability from stroke, previous studies have generally shown low use of anticoagulation. There is currently a lack of data on very long term use of anticoagulation in AF, and also on use of anticoagulation after AF ablation procedures. We followed up patients 1-5 years out from ablation at Johns Hopkins to assess their use of anticoagulation. These patients were followed in a variety of practice settings, not just at the tertiary care center of Johns Hopkins Hospital.

Methods: We sent a follow up questionnaire to patients from the Johns Hopkins Atrial Fibrillation database who underwent an AF ablation between 12 and 60 months ago. Patients were asked to report whether they were still being prescribed anticoagulation, the type of anticoagulation (warfarin, dabigatran, rivaroxaban, or apixaban), and the specialty of the physician managing their anticoagulation (PCP, general cardiologist, or EP). Replies from this survey were compared to stroke risk scores derived from baseline demographic data obtained from the electronic medical record.

Result: We received 128 responses out of 350 patients to whom surveys were sent. Mean age was 62.9 +/- 13.5, mean CHADS-VASc score was 2.2 +/- 1.5. The mean time since ablation was 50.3 months. Use of anticoagulation increased with increasing CHADS-VASc score (Table), however even in the highest risk group, use of anticoagulation was suboptimal (84.0% for CHADS-VASc scores >= 4). Overall 77.8% of patients with a CHADS-VASc score >= 2 reported taking anticoagulation. The vast majority (88.9%) reported taking NOACs rather than warfarin. There was no association between the specialty of the managing physician and use of AC (p = 0.6).

Conclusion: Although these results are derived from an unrandomized survey, they offer insight into real world anticoagulation management. Long term use of anticoagulation in AF patients remains suboptimal, even in high risk patients. More than one in five patients with a CHADS-VASc score >= 2 was not being prescribed anticoagulation, and increasing physician specialization in arrhythmia management was not associated with higher rates of anticoagulation use. Further studies will investigate the reasons for discontinuation of anticoagulation, and patient or procedure factors that predict use of anticoagulation.