Atrial Fibrillation with Hypertrophic Cardiomyopathy and Stroke Prevention

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Hypertrophic cardiomyopathy (HCM) is characterized by left ventricular hypertrophy (LVH) of various morphologies, with a wide array of clinical manifestations and hemodynamic abnormalities. Patients with HCM are prone to both atrial and ventricular arrhythmias. In patients with HCM, the prevalence of atrial fibrillation (AF) has been known to be four- to sixfold higher than similarly aged patients in the general population. In addition, it has been reported that the incidence of ischemic stroke in HCM is markedly increased if complicated by AF as compared with that in patients with AF alone. Therefore, even in patients with HCM and AF with low CHA₂DS₂-VASc score, most guidelines recommend chronic oral anticoagulation with warfarin for stroke prevention, with a target INR of 2.0 to 3.0. In patients whose INR is variable and difficult to control on warfarin, use of the newly developed direct oral anticoagulants (eg, dabigatran, rivaroxaban, apixaban) may be considered, although these medications have not been studied in patients with HCM. We present a case of a 48-year-old man with apical HCM and AF who suffered from ischemic thromboembolic stroke despite a low CHA₂DS₂-VASc score and continuous use of warfarin.