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Editorial Comment

Effectiveness and Safety of Oral Anticoagulants in Patients with Atrial Fibrillation

Atrial fibrillation (AF) is the most commonly cardiac arrhythmia, typically increases with age. It has been estimated that 6–12 million people worldwide will suffer this condition in the US by 2050 and 17.9 million people in Europe by 2060.[1] The overall prevalence of AF in Taiwanese is 1.4% in men and 0.7% in women.[2] Patients with AF are at increased risk for thromboemboic events, especially acute ischemic stroke, which may cause subsequent immobolization, hospitalization or even death. Hence, the role of primary and secondary prevention of acute ischemic stroke in patient with AF is crucial. Four large randomized controlled trials have demonstrated that non-vitamin K antagonist oral anticoagulants (NOACs) are non-inferior to vitamin K antagonists in preventing stroke and systemic embolism, as well as regarding their risk for major bleeding, so, NOACs are considered by AF guidelines world-wide as the preferred choice of anticoagulants to prevent stroke in patients with AF.[3]

In this issue, Ya Ju Lin and Helen Po highlighted that oral anticoagulant therapy for primary and secondary stroke prevention in patients with nonvalvular AF was still underutilized in Taiwan. Patients with nonvalvular AF who didn't receive anticoagulation were more likely to have a high NIHSS score, longer length of hospital stay and higher rates of poor function outcomes at discharge and at 90 days. Hence, we should improve physician's preference for anticoagulation, especially NOACs, in nonvalvular AF patients to reduce stroke severity and disability.

As more patients start using NOACs, the number of bleeding events is expected to increase. The effect of NOACs in reducing stroke should be balanced by the bleeding risk, especially in geriatric patients. One recent systematic review and meta-analysis[4] reported the superior effectiveness for stroke and mortality and non-inferior safety for major bleeding of NOACs versus vitamin K antagonists in older AF patients. Overall, we should pay more attention to bleeding events while using NOACs, especially in Asian and elder patients.

Conflicts of interest

The authors declare that they have no conflicts of interest related to the subject matter or materials discussed in this article.

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