Aspirin and clopidogrel versus warfarin in prevention of stroke and peripheral embolization in atrial fibrillation

林立人

成大醫院心臟內科 成大醫學院 醫學系 / 藥學系 / 臨床藥學暨藥物科技研究所

Warfarin is highly efficacious for the long-term prevention of ischemic stroke in atrial fibrillation (AF). However, there are several limitations that substantially prevent the clinical use of warfarin, including hemorrhagic stroke and other bleeding complications, interactions with foods and drugs, need for frequent INR monitoring, and patient and physician reluctance.

The benefit of combining clopidogrel with aspirin arose from patients with acute coronary syndrome. The Atrial Fibrillation Clopidogrel trial with Irbesartan for Prevention of Vascular Events (ACTIVE) provided the solely data for the combination use of these two antiplatelet agents in prevention of stroke in AF. ACTIVE W provided the comparison between warfarin versus aspirin and clopidogrel. Adjusted-dose warfarin is significantly more effective than clopidogrel (75 mg daily) plus aspirin (75-100 mg daily) in prevention of stroke in AF patients (1.4% per year with warfarin vs. 2.4% with clopidogrel plus aspirin; RR 0.58, 95% CI 0.42-0.81) and does not cause more bleeding (2.2% vs. 2.4% per year; RR 0.91, 95% CI 0.69-1.20). Concerning about the intracranial hemorrhage, warfarin is associated with a two-fold excess of risk (0.6% vs. 0.3% per year).

In terms of secondary prevention for stroke in patients with AF, adjusted-dose warfarin is significantly more effective than the combination of clopidogrel plus aspirin (3.0% per year with warfarin vs. 6.2% with clopidogrel plus aspirin; RR 0.47, 95% CI 0.25-0.81).

As we are entering the era of non-VKA oral anticoagulants for stroke prevention in AF, there is no classic role for the combination use of clopidogrel and aspirin in stroke prevention in AF.