

論 文 要 旨

A randomized comparison of two direct oral anticoagulants for patients undergoing cardiac ablation with a contemporary warfarin control arm

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Abstract

Background The safety and efficacy of periprocedural use of direct oral anticoagulants (DOACs) for atrial fibrillation (AF) remain unclear. We compared the incidence of asymptomatic cerebral micro-thromboembolism and hemopericardium following AF ablation among patients receiving edoxaban, rivaroxaban, and warfarin and between normal- and low-dose use of edoxaban and rivaroxaban.

Methods This prospective randomized study included 170 consecutive AF patients. Patients taking DOACs upon admission to our hospital were randomly assigned to an edoxaban group or to a rivaroxaban group. Warfarin was continued in patients receiving warfarin at admission. All patients underwent AF ablation, and cerebral MRI was performed to evaluate asymptomatic cerebral micro-thromboembolism the day after the procedure.

Results Sixty-one patients were assigned to edoxaban and 63 to rivaroxaban. Warfarin was continued in 46 patients. Although asymptomatic cerebral micro-thromboembolism was detected in 25 patients (16.3%), there were no significant differences among the groups. Hemopericardium occurred in 2 patients (one each in the rivaroxaban and warfarin groups). The incidence of asymptomatic cerebral micro-thromboembolism was higher in the low-dose group (9 patients, 25.7%) than in the normal-dose group (8 patients, 10.0%) for patients prescribed either edoxaban or rivaroxaban ($p < 0.05$). The proportion of males (88.0%, 69.5%, $p < 0.05$), history of prior AF ablation (64.0%, 42.2%, $p < 0.05$), and hypertension (68.0%, 46.1%, $p < 0.05$) were significantly higher in patients with cerebral thromboembolism.

Conclusions The incidence of asymptomatic cerebral micro-thromboembolism and hemopericardium in AF ablation was similar among patients using edoxaban, rivaroxaban, and warfarin. However, low doses of DOACs may increase the risk of asymptomatic stroke.