Effects of Uninterrupted Dabigatran on the intensity of Anticoagulation during Atrial Fibrillation Ablation

Takumi Osawa
Hitoshi Mori
Tsukasa Naganuma
Akira Hamabe
Toyokazu Kimura
Akane Kawai
Daisuke Kawano
Mitsuki Yamaga
Shun Akai
Hirotugu Tabata

Introduction: Uninterrupted dabigatran is now established as the standard care of periprocedural anticoagulation. However, there are few reports on the effects of uninterrupted dabigatran on the intensity of anticoagulation during atrial fibrillation (AF) ablation.

Methods: Two hundred fifty patients underwent AF ablation from January 2017 to December 2018 in our institute. The patients who took warfarin or underwent ablation with uninterrupted direct oral anticoagulants (DOACs) other than dabigatran were excluded. Eighty-nine patients underwent ablation with uninterrupted dabigatran (uninterrupted group, male 72, mean age 59.8±14.0) and 124 with interrupted DOACs (interrupted group, male 106, mean age 56.9±12.8) during the perioperative period. The initial ACT level, total number of ACTs less than 300 during the procedure, and total amount of heparin were compared. Furthermore, the incidence of complications was also evaluated.

Result: The initial ACT level was significantly higher in the uninterrupted group, and the total number of ACTs of less than 300 was significantly lower in the uninterrupted group (uninterrupted vs. interrupted; initial ACT level, 315.6±59.8 vs. 264.5±48.6, p<0.0001; total number of ACTs <300, n [\%],133 / 379 [35.1 \%] vs. 278 / 566 [49.1\%], p<0.0001). The total amount of heparin was significantly lower in the uninterrupted than interrupted group (uninterrupted group vs. interrupted group; 12966.3±4773.2 vs. 16371.0±5211.7, p<0.0001). There was no significant difference in the incidence of complications between the two groups (p=0.39).

Conclusion: Uninterrupted dabigatran was safe and useful for a stable anticoagulation during the ablation of AF.