Mortality Predictors in Dialysis Patients with Atrial Fibrillation

For hemodialysis patients with atrial fibrillation (AF), antiplatelet drugs are associated with increased mortality, and oral anticoagulants may be associated with better survival, reports a study in *Nephrology Dialysis Transplantation*.

In the prospective study, all patients with documented AF at 10 Italian hemodialysis centers were followed up for 2 years. The use of oral anticoagulant and antiplatelet drugs and the percentage of time spent in the target international normalized ratio range (TTR) were assessed as predictors of death, thromboembolic events, and bleeding. The predictive value of age, dialytic age, and comorbid conditions was also assessed.

Of 290 patients with AF enrolled in the study, 134 were taking oral anticoagulants at baseline. There were 115 deaths during follow-up, including three deaths resulting from hemorrhagic stroke and one resulting from thromboembolic stroke. Patients taking antiplatelet drugs were at increased risk of death: hazard ratio (HR) 1.71. Other significant risk factors were age 75 years or older, permanent AF, heart failure, and history of bleeding episodes.

The estimated survival was 68.6 percent for patients who always took oral anticoagulants versus 49.6 percent for patients who stopped taking these medications. The risk of thromboembolism was unaffected for patients taking oral anticoagulants, but the risk of bleeding was increased: HR 3.96. Patients with a higher TTR had a lower risk of bleeding: HR 0.09. The risk of bleeding was higher for those with previous hemorrhagic events: HR 2.17.

This study documents the 2-year mortality of about 40 percent in dialysis patients with AF. Patients taking antiplatelet drugs may be at increased risk of death. Mortality appears lower for patients taking oral anticoagulants; the bleeding risk is higher, although the risk of hemorrhagic stroke is unaffected. More time in the TTR is associated with a lower risk of bleeding among hemodialysis patients with AF [Genovesi S, et al. Warfarin use, mortality, bleeding and stroke in haemodialysis patients with atrial fibrillation. *Nephrol Dial Transplant* 2015; 30:491–498].