

# Undertreatment of Atrial Fibrillation 'Alarming'

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BARCELONA — The undertreatment of atrial fibrillation patients with respect to international guideline–recommended stroke prophylaxis is disturbingly common in real-world clinical practice—and the consequences show up in markedly increased thromboembolic event rates, compared with patients treated in accord with the guidelines, Dr. Robby Nieuwlaat said at a joint meeting of the European Society of Cardiology and the World Heart Federation.

Overtreatment of patients with atrial fibrillation is considerably less common than undertreatment. And unlike the case in undertreated patients, there really is no price associated with overtreatment. The risk of major bleeding in overtreated patients isn't significantly greater than in those on appropriate antithrombotic treat-

ment as defined by the guidelines, according to Dr. Nieuwlaat, professor of cardiology at University Hospital Maastricht, the Netherlands.



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These were among the key findings of the Euro Heart Survey on atrial fibrillation. The survey, conducted by the European Society of Cardiology, included 4,086 patients with atrial fibrillation enrolled in 35 countries during 2003-2004 for whom complete 1-year follow-up data were available. Their management was compared with that recommended in the then-current 2001 American College of Cardiology/American Heart Association/European Society of Cardiology atrial fibrillation management guidelines. Those guidelines were recently updated (*J. Am. Coll. Cardiol.* 2006;48:854-906).

As defined in the guidelines, 89% of participants were classified as being at high or highest thromboembolic risk. Dr. Nieuwlaat and his coinvestigators defined undertreatment as failure to prescribe warfarin in high-risk patients without bleeding risk factors or not prescribing antiplatelet therapy in intermediate-risk patients. Overtreatment was defined as using warfarin in patients at low or intermediate risk for thromboembolism.

In a multivariate analysis, undertreated patients had an adjusted 42% increased risk of stroke during 1 year of follow-up, compared with patients receiving guideline-adherent stroke prophylaxis, and a 97% increased relative risk of any systemic thromboembolic event. In contrast, overtreated patients had a 34% reduction in stroke risk and 15% decreased risk of any thromboembolism relative to appropriately treated patients.

The incidence of intracranial hemorrhage was 0.1% in undertreated, 0.4% in

appropriately treated, and 0.3% in overtreated patients, he continued. Undertreated patients had 11% less relative risk of major bleeding than did appropriately treated ones. But their combined rate of cardiovascular death, any thromboembolism, or major bleeding was 54% greater than in patients managed in accord with the guidelines. The 15% increased risk of the combined end point observed in overtreated patients didn't attain statistical significance.

Dr. Nieuwlaat said the study's clinical implications are clear: "Risk for stroke should outweigh fear of bleeding. Stroke rates are much higher than bleeding rates."

Physicians should deny oral anticoagulation in patients at high risk for thromboembolism only if they are also at high risk for intracranial hemorrhage or have other strong risk factors for major bleeding, he added.

Session cochair Dr. Andreas Götte called the 26% rate of undertreatment

found in the Euro Heart Survey "really alarming," particularly in light of evidence obtained through the survey that undertreatment virtually doubled thromboembolic event risk.

"This is a very important message we can get only from these registry studies. We really need huge registries like the Euro Heart Survey to make clear how our treatments work in real life in the general community," observed Dr. Götte of Otto-von-Guericke University, Magdeburg, Germany. ■

