

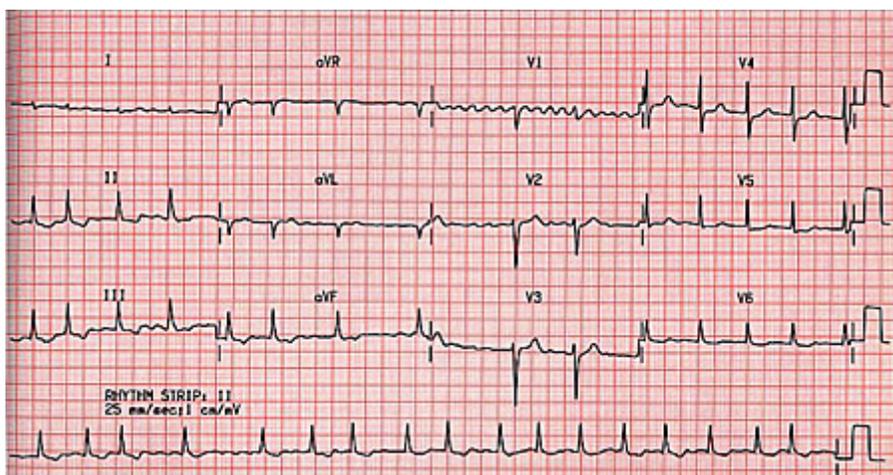
Some Atrial Fibrillation Patients Receive Unnecessary Blood Thinners

Researchers believe cardiology specialists may be unaware of risk

April 13, 2015 | Heather Buschman, PhD and Scott LaFee

About one quarter of all atrial fibrillation patients at the lowest risk for stroke receive unnecessary blood thinners from cardiology specialists, according to a new study by researchers at University of California, San Diego School of Medicine and University of California, San Francisco, and these health care providers must be made aware of the resulting potential health risks. The findings are published online April 13 by *JAMA Internal Medicine*.

“Clinicians who prescribe blood thinners need to be diligent about weighing the risks and benefits of these medications,” said lead author [Jonathan C. Hsu, MD](#), cardiologist and assistant clinical professor of medicine at UC San Diego. “In those who have no risk factors for stroke, the risk of bleeding likely outweighs the benefit of stroke reduction. The fact that blood thinners were prescribed to so many patients with no risk factors for stroke is a wakeup call that we need to do better for our patients.”



An electrocardiogram reading traces irregular, rapid and chaotic atrial activity, seen in lead V1 (the top squiggly line).

In atrial fibrillation, electrical impulses are triggered from many areas in and around the upper chambers of the heart instead of just one area. This activity is chaotic, and the atrial walls quiver rather than contract normally in moving blood to the lower chambers.

For atrial fibrillation patients at risk for blood clots, anticoagulation therapies such as

warfarin or other drugs reduce the risk of illness and death. But because their use carries a

bleeding risk, they are not recommended for atrial fibrillation patients at a particularly low risk for stroke.

In fact, current guidelines do not recommend oral anticoagulation in patients under age 60 without heart disease or other known risk factors for blood clots or in atrial fibrillation patients without any established risk factor for stroke. What's more, the previous guidelines, which were in place at the time the data for this study were collected, contained a very strong recommendation specifically to avoid anticoagulants in that population.

To examine the prevalence of inappropriate anticoagulant prescriptions in young and healthy patients at the lowest risk for blood clots, Hsu and team used a large national registry of cardiovascular patients. From this, they reviewed nearly 11,000 patients age 60 and under and found that roughly 25 percent were prescribed oral anticoagulant therapy contrary to contemporary guideline recommendations. Further, they found that males with atrial fibrillation at the lowest risk of stroke were more likely to be prescribed oral anticoagulation than females, as were older patients and overweight patients without stroke risk factors.

"The irony is that there is a general push to get providers to prescribe these drugs, and they are also generally under-prescribed among many atrial fibrillation patients who actually need them," said senior author Gregory Marcus, MD, director of clinical research at UC San Francisco. "Our study suggests people are trying to do the right thing but, due to a lack of understanding of some of the critical nuances, go too far in that direction in low-risk patients."

Co-authors of this study also include Paul S. Chan, Fengming Tang, St. Luke's Mid America Heart Institute and the University of Missouri, Kansas City; and Thomas M. Maddox, Veterans Affairs Eastern Colorado Health Care System/University of Colorado School of Medicine.

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