Combining risk score tools improves stroke prediction for atrial fibrillation patients
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Combining two independent, scientifically-proven risk measurements allows physicians to better predict an atrial fibrillation patient's risk of stroke or death. The tools also help determine the need for blood thinners in treatment, according to new research from researchers at the Intermountain Medical Center Heart Institute in Salt Lake City.

Blood thinners are used to prevent atrial fibrillation patients from a stroke. But blood thinners like warfarin are more complicated to manage and come with increased risk of uncontrolled bleeding. Researchers combined the commonly used CHA2DS2-VASc tool with an extensively validated tool—the Intermountain Mortality Risk Score—to improve stroke and mortality predictions in atrial fibrillation patients and provide a more individualized approach to a patient's need for blood thinners as part of treatment.

Results of the study will be presented during the American College of Cardiology's 2017 Scientific Session in Washington D.C. on Saturday, March 18.

"The CHA2DS2-VASc score isn't terribly predictive of outcomes, but it's easy to use and so it has served as a guideline to help calculate stroke risk for many years," said Benjamin Horne, PhD, lead author of the study and researcher at the Intermountain Medical Center Heart Institute. "But there are many variables not accounted for in the CHA2DS2-VASc score, so combining it with the Intermountain Mortality Risk Score provides a more complete predictive tool for physicians."

The CHA2DS2-VASc score is an easy-to-use international guideline to determine a patient's need for blood thinner. Points are added based on age, gender, history of stroke, hypertension, heart failure or diabetes. An atrial fibrillation patient with a score of 2 or more is placed on blood thinners.

The Intermountain Mortality Risk Score is based on lab values typically collected from a patient—a complete blood count and basic metabolic profile—which sync automatically to a patient's electronic medical record so physicians have the score readily available.

"One of the biggest issues with the CHA2DS2-VASc score is its simplicity," said Dr. Horne. "For example, a woman with atrial fibrillation who's over age 65 would automatically be placed on blood thinners. She gets one point for being over 65 and another for being a woman. But those two factors alone don't provide a comprehensive picture of her risk for stroke."

In the study, researchers found the Intermountain Mortality Risk Score offered a more accurate scale of low and high risk in patients with a CHA2DS2-VASc score of 2, which provides physicians with a better guide for determining if a
blood thinner is right for their patient.

Provided by Intermountain Medical Center

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