ARRHYTHMIAS

A new risk score for AF progression

Investigators have developed a new risk score for progression of atrial fibrillation (AF). The HATCH score was proposed on the basis of findings from a subgroup analysis of the Euro Heart Survey.

Cees de Vos and colleagues from the Maastricht University Medical Centre in the Netherlands assessed records for 1,219 patients with first-detected or paroxysmal AF in whom sinus rhythm was restored spontaneously or using pharmacological treatment.

At the 1-year follow-up, 15% of patients had progressed to persistent or permanent AF. Independent factors associated with AF progression were hypertension, age older than 75 years, stroke or transient ischemic attack (TIA), chronic obstructive pulmonary disease (COPD), and heart failure. Diabetes was not linked to AF progression. On the basis of their findings, the investigators developed the HATCH score for prediction of AF progression:

$(1 \times \text{Hypertension}) + (1 \times \text{Age} > 75 \text{ years}) + (2 \times \text{Stroke or TIA}) + (1 \times \text{COPD}) + (2 \times \text{Heart failure})$.

Of the patients who had paroxysmal AF at baseline, 50% with a HATCH score of 6 or 7 experienced AF progression, compared with 6% of those with a HATCH score of 0. The investigators stress that the HATCH score should be validated in another AF population before it is used in clinical practice.

“We believe that better individual characterization of AF enables prediction of arrhythmia progression and its complications” states de Vos. The investigators are thus now investigating new echocardiographic tools to facilitate good noninvasive characterization of the atria.

Bryony M. Mearns

Original article de Vos, C. B. *et al.* Progression from paroxysmal to persistent atrial fibrillation: clinical correlates and prognosis. *J. Am. Coll. Cardiol.* 55, 725–731 (2010)