

In Brief

Clinical news

AF associated with increased risk of many cardiovascular events, not just stroke

By Nicole MacKee

Reducing stroke risk is just the start in patients with atrial fibrillation (AF), say researchers who report that the risk of other cardiovascular events, such as heart failure, is greater than that of stroke.

In a systematic review and meta-analysis published in the *BMJ*, the researchers analysed 104 cohort studies that involved more than 9 million patients, including 587,867 with AF. They found AF to be associated with an increased risk of all-cause mortality (relative risk [RR], 1.46), cardiovascular mortality (RR, 2.03), major cardiovascular events (RR, 1.96), stroke (RR, 2.42), ischaemic stroke (RR, 2.33), ischaemic heart disease (RR, 1.61), sudden cardiac death (RR, 1.88), heart failure (RR, 4.99), chronic kidney disease (RR, 1.64) and peripheral arterial disease (RR, 1.31).

An association between AF and haemorrhagic stroke was not found, although the researchers reported that the confidence intervals (CIs) were wide (RR, 2.00; 95% CI, 0.67 to 5.96).

The authors concluded that 'interventions aimed at reducing outcomes beyond stroke' were required in patients with AF.

Professor Peter Kistler, Head of Clinical Electrophysiology Research at the Baker IDI Heart and Diabetes Institute, said the broader risks of AF were well known, but he welcomed the quantification of these risks.

'The key message here is that we need to be vigilant about atrial fibrillation, particularly the importance of anticoagulation,' said Professor Kistler, who is also Head of Electrophysiology at Melbourne's The Alfred Hospital.

AF was generally thought to be associated with a fivefold increased risk of stroke, he said, but this study suggested a lesser degree of risk.

Of all the outcomes examined in the study, heart failure was shown to have the highest absolute risk increase, but Professor Kistler said the jury was still out on the direction of causality.

'There is a chicken-and-egg discussion around heart failure because there are mechanisms through which atrial fibrillation can drive heart failure, and there are certainly mechanisms through which the opposite can occur,' Professor Kistler told *Cardiology Today*.

Also, he said, the association with chronic kidney disease had been known for some time, but AF was unlikely to be causative.

'It would be more likely that chronic kidney disease particularly due to associations with hypertension and valvular heart disease is driving AF, rather than the other way around,' he said.

In terms of future management, Professor Kistler said he looked forward to the findings of a large study now underway that had randomised 2000 patients to either catheter ablation or antiarrhythmic

drug therapy to determine mortality and stroke outcomes.

BMJ 2016; 354: i4482.

Picture credit: © Animated Healthcare Ltd/SPL