

RESEARCH HIGHLIGHTS

BLOOD PRESSURE PREDICTS AF IN WOMEN

A prospective study in a cohort of initially healthy women has shown that those with higher blood pressure have a higher risk of developing atrial fibrillation (AF).

Although previous studies have shown that hypertension is the most common and most modifiable risk factor for AF, information was lacking on the relationships between blood pressure as a continuous variable and AF, and between blood pressure levels in the nonhypertensive range and new-onset AF.

Conen *et al.* investigated the relationship between systolic and diastolic blood pressure measurements and the risk of incident AF in 34,221 women (mean age 55 ± 7 years) initially free from cardiovascular disease who were enrolled in the Women's Health Study. During a median follow-up of 12.4 years, incident AF was reported in 644 women. "We found a highly significant risk gradient across categories of systolic and diastolic blood pressure," comments David Conen of the University Hospital Basel, Switzerland. Increasing systolic and diastolic blood pressure was associated with a notable increase in risk of incident AF; overall, systolic blood pressure was a stronger predictor than diastolic blood pressure. Women with blood pressure levels just below the current threshold for diagnosing hypertension (that is, systolic blood pressure of 130–139 mmHg or diastolic blood pressure of 85–89 mmHg) had a 28% and 53% increase in risk of incident AF, respectively, compared with women with systolic blood pressure <120 mm Hg or diastolic blood pressure <65 mmHg.

"Because of the high prevalence of only slightly elevated blood pressure, successful blood pressure lowering strategies in these patients [at risk for AF] might help to reduce the increasing burden of AF in the population," Conen concludes.

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Original article Conen, D. *et al.* Influence of systolic and diastolic blood pressure on the risk of incident atrial fibrillation in women. *Circulation* 119, 2146–2152 (2009).