Is Higher RV Afterload Associated With Greater Atrial Fibrillation Risk Independent of LA and LV Remodeling?

**STUDY DESIGN**

Observational prospective study of 2,246 older adults; those without cardiovascular disease identified and followed for 6.3 years (median)

Incident atrial fibrillation (AF) identified in 215 patients

Echocardiogram used to measure estimated pulmonary artery systolic pressure (PASP) and pulmonary vascular resistance (PVR)

**RESULTS**

AF risk significantly higher in the 3rd (vs 1st) tertile of both

PASP
[HR 1.65; 95% CI, 1.08-2.54]

PVR
[HR 1.38; 95% CI, 1.00-2.08]

Association was
- Independent of LA and LV structure/function, HR, BMI, sleep apnea, systolic blood pressure, antihypertensive medications, and lung, kidney, and thyroid function
- Persisted after exclusion of those with elevated tricuspid and mitral velocity

In older adults, higher RV afterload is associated with greater AF risk independent of LA and LV remodeling.

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