

Resting Heart Rate and Adverse Coronary Events in Women

Higher resting heart rate was associated independently with incidence of MI or coronary death.

Resting heart rate independently predicts adverse coronary events in men. In women, however, this association has not been clearly established. In a prospective observational study that involved nearly 130,000 postmenopausal women who were enrolled in the Women's Health Initiative, investigators assessed the association between resting heart rate and cardiovascular events. At baseline, participants did not have cardiovascular disease and were not taking medicines that affected heart rate.

During a mean follow-up of 7.8 years, 2281 women experienced myocardial infarctions or coronary death, and 1877 experienced strokes. Analysis adjusted for cardiovascular risk factors such as hypertension, diabetes, and cholesterol levels revealed that higher resting heart rate was associated independently with MI or coronary death: Women with resting heart rates >76 beats per minute (bpm) were 26% more likely to have experienced adverse coronary events than were women with resting heart rates \leq 62 bpm. The association between higher resting heart rate and incidence of coronary events was stronger in younger women (age, 50–64) than in older women (age, 65–79). Resting heart rate was not associated with stroke incidence.

Comment: Resting heart rate — an inexpensive measure of autonomic tone — independently predicts MI or coronary death in women. This relation was more pronounced in younger postmenopausal women than in older women. The authors suggest that women with higher resting heart rates be targeted for more-aggressive management of cardiovascular risk factors.

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