

ATRIAL FIBRILLATION

Obesity increases risk of AF in women

Simple strategies for primary prevention of atrial fibrillation (AF) have not been well described. In a new analysis involving participants of the Women's Health Study, Usha Tedrow and colleagues show that elevated BMI increases both the short-term and long-term risks of developing AF.

The relationship between obesity and risk of AF is known, but the underlying mechanisms are not well understood. Before this study, the influence of weight change in AF risk was also not clear.

The researchers followed up a cohort of 34,309 women for a mean of 12.9 years. Participants self-reported their BMI, cardiovascular risk factors, and levels of inflammation markers through questionnaires at baseline and periodically during follow-up. The occurrence of AF was similarly self-reported and confirmed by review of medical records.

BMI was linearly associated with the risk of AF. This association was stronger among women ≤ 60 years old at baseline; obese women in this group had a more than twofold increased risk of AF. This

increased risk was no longer present in women who stopped being obese within 5 years of baseline. Therefore, Tedrow suggests, "a strategy of weight control may reduce the increased incidence of AF"

“...This increased risk was no longer present in women who stopped being obese...”

The association between BMI and AF risk could not be explained by traditional cardiovascular risk factors and inflammation. "We are planning to look at other markers of adiposity and body size [that] might give a clue to other mechanical reasons [for] why obesity might lead to increased risk of AF," says Tedrow.

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Original article Tedrow, U. B. *et al.* The long- and short-term impact of elevated body mass index on the risk of new atrial fibrillation: the WSH (Women's Health Study). *J. Am. Coll. Cardiol.* 55, 2319-2327 (2010)