

Healthy Lifestyle - Key Factor in AF Prevention



Atrial fibrillation (AF), the most common persistent cardiac arrhythmia, is an increasing burden worldwide. The global burden of AF in 2010 was estimated at about 33.5 million, with close to 5 million new cases diagnosed annually. A high proportion of AF can be prevented by combining strategies, focusing on the high-risk population for better risk factor management, and emphasising healthy lifestyle choices in the whole population, according to a review published in Journal of the American College of Cardiology.

See Also: Does Cardioversion for AF Improve Quality of Life?

AF significantly influences health and healthcare. AF is associated with an increased risk for morbidity, with 5-, 3-, and 2-fold increased risk for stroke, heart failure, and dementia, respectively, and 40% to 90% increased risk for mortality. However, the paper notes, AF prevention has not been emphasised enough in clinical practice or guidelines. Cardiology practice has focused primarily on AF treatment and AF-related stroke prevention rather than preventing AF itself. It is estimated that at least 80% of coronary heart disease could be prevented if the major risk factors were eliminated.

Modifiable Lifestyle Factors

The study authors reviewed the associations of modifiable lifestyle factors, including alcohol abuse, smoking, physical inactivity, and unhealthy psychological stress, with the risk for AF development.

Risk for AF increased with increased alcohol consumption. More than 21 drinks weekly increased AF risk by 39%, and >35 drinks increased AF risk by 45% in the Copenhagen City Heart Study and by 1.90 times in a Japanese study. Given the popularity of unhealthy drinking, a nonnegligible proportion of AF can be prevented if unhealthy drinking is avoided, the authors point out.

There is growing evidence that physical activity (PA) and cardiorespiratory fitness are closely associated with the risk for AF development. However, the association varies among different populations and at different levels of intensity. Walking and bicycling are considered low- to moderate-intensity PA, whereas leisure-time exercise, such as running, soccer, and swimming, among others, is considered moderate- to high-intensity PA. However, current data suggest that vigorous exercise might be associated with increased AF risk. Other risk factors that can be modified to prevent AF include:

- Psychosocial factors: Negative emotions (anger, stress, impatience, anxiety) were associated with 3- to 6-fold higher risk for AF
 occurrence among patients with paroxysmal AF, whereas happiness had a protective effect.
- The Rotterdam study reported a 51% higher risk for AF development among current and former smokers. A smoker's excess risk for AF reduces after quitting, another study showed.

Linear Relationships

The authors also reviewed the associations of cardiovascular risk factors that can be better managed, including obesity and overweight, high blood pressure, diabetes, dyslipidaemia, obstructive sleep apnoea, and other cardiovascular diseases, with the risk for AF.

Many risk factors, such as blood pressure, BMI, and alcohol consumption, have linear relationships with AF risk. Small reductions in blood pressure or body weight by population-wide lifestyle modification will shift the population AF risk distribution curve to the left. In contrast, tiny increases in the mean values of blood pressure, BMI, and alcohol consumption in the whole population will increase the population risk for developing AF disproportionately.

It is important for healthcare providers to discuss lifestyle modification and risk factor control for patients at high risk for developing AF, the authors say.

Source: Journal of the American College of Cardiology

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