Statins appear associated with reduced risk of recurrent cardiovascular events in men, women

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Cholesterol-lowering statin drugs appear to be associated with reduced risk of recurrent cardiovascular events in men and women, but do not appear to be associated with reduced all-cause mortality or stroke in women, according to a report of a meta-analysis published June 25 in the *Archives of Internal Medicine*, a JAMA Network publication.

Statins have been used to lower cholesterol levels for the last 20 years, but most of the clinical trials on the drugs have predominantly enrolled men. There have been conflicting results on the benefits of statins for women with cardiovascular disease compared with men in secondary cardiovascular disease prevention, according to the study background.

Jose Gutierrez, M.D., M.P.H., of Columbia University Medical Center, New York, and colleagues conducted a meta-analysis of 11 clinical trials (a total of 43,191 participants) to examine whether statin therapy was more effective than placebo in preventing recurrence of cardiovascular events and all-cause mortality in men and women. Researchers also sought to determine the sex-specific effect of statins on the risk of recurrent cardiac and cerebrovascular events.

"In our results, statin therapy reduced the recurrence rate of any type of cardiovascular event, all-cause mortality, coronary death, any MI [myocardial infarction or heart attack], cardiac intervention, and any stroke type. The stratification by sex showed no statistically significant risk reduction for women taking statins compared with women taking placebo for the reduction of all-cause mortality and any type of stroke," the authors comment.

However, the authors observe that the results of their meta-analysis "underscore" the low rate of women being enrolled in cardiovascular prevention clinical trials.

"Women represented only a fifth of the studied sample, limiting the strength of our conclusions. In our results, the benefit associated with statin administration in women did not reach statistical significance compared with placebo in at least two outcomes, all-causes mortality and any stroke type. The reason for this difference is uncertain. One possibility is that the small sample size of women limits the power of the study," the authors note.

The authors conclude "this meta-analysis supports the use of statins in women for the secondary prevention of cardiovascular events."

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