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## LARGE CLINICAL TRIAL FINDS STATINS SAFE AND LIKELY EFFECTIVE FOR PREVENTING CARDIOVASCULAR EVENTS IN PATIENTS WITH RHEUMATOID ARTHRITIS

**APRIL 15, 2019** - Results from a large clinical trial indicate that patients with rheumatoid arthritis are likely to experience the same level of cardiovascular benefits from statins as other individuals, without additional risks. The findings appear in *Arthritis & Rheumatology*, an official journal of the American College of Rheumatology.

Patients with rheumatoid arthritis have an approximately 50 percent higher risk of experiencing cardiovascular events such as heart attack and stroke compared with the general population. By lowering LDL cholesterol, statins are known to help prevent cardiovascular events in certain high-risk individuals, but it's unclear whether they are safe and effective for patients with inflammatory conditions such as rheumatoid arthritis.

To investigate the potential risks and benefits of statins in moderate risk patients with rheumatoid arthritis, researchers designed the Trial of Atorvastatin for the Primary Prevention of Cardiovascular Events in Patients with Rheumatoid Arthritis (TRACE RA), a multi-center, randomized, double-blind trial comparing the statin atorvastatin with placebo.

The trial included 3,002 patients with rheumatoid arthritis who were over aged 50 years or had rheumatoid arthritis for more than 10 years, without clinical atherosclerosis, diabetes, or myopathy. Patients were randomized to receive atorvastatin 40mg daily or placebo.

During a median follow-up of 2.5 years, 1.6 percent of patients who received atorvastatin and 2.4 percent of patients receiving placebo experienced cardiovascular death, heart attack, stroke, transient ischemic attack, or any arterial revascularization. After adjustments, there was a 40 percent lower risk of cardiovascular events for patients taking atorvastatin, although the difference was not statistically significant. This was because the overall rate of events was low.

At the end of the trial, patients taking atorvastatin had significantly lower LDL cholesterol as well as significantly lower levels of C-reactive protein, a marker of inflammation, compared with patients taking placebo. Adverse events in the atorvastatin and placebo groups were similar.

The paper's lead author is Professor George Kitas of Dudley Group NHS Foundation Trust, while co-senior authors are Professor Jill Belch of the University of Dundee and Professor Deborah Symmons of the University of Manchester.

“The trial found that the statin reduced levels of cholesterol by similar amounts as has been seen in other populations studied. The results also show that it is as safe for patients with rheumatoid arthritis to take statins as for the general population,” said Prof. Symmons. “In addition, because of the low overall rate of cardiovascular events in the trial population, there is no indication for all patients with rheumatoid arthritis to be prescribed a statin. This is unlike diabetes where the great majority of patients are recommended to take a statin.”

The study authors recommend that patients with rheumatoid arthritis be prescribed statins according to national or local guidelines for managing cardiovascular risk in the general population.

An accompanying editorial notes that the study provides information that will be useful for researchers and clinicians who focus on rheumatoid arthritis, and the results may be helpful when considering cardiovascular risk across other rheumatic diseases.

*Full citation: George D. Kitas, Peter Nightingale, Jane Armitage, Naveed Sattar, Jill J.F. Belch, Deborah P.M. Symmons. Trial of Atorvastatin for the primary prevention of cardiovascular events in patients with rheumatoid arthritis (Trace Ra): A multicenter, randomized, placebo controlled trial. Arthritis & Rheumatology, 2019; DOI: 10.1002/art.40892*

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