

## Study: Rheumatoid arthritis nearly doubles risk of surprise heart attack

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Risk of heart attack is increased even without symptoms

Patients with rheumatoid arthritis are at increased risk of a surprise heart attack, according to new research presented today at ICNC 12 by Dr Adriana Puente, a cardiologist in the National Medical Centre "20 de Noviembre" ISSSTE in Mexico City, Mexico. Risk was increased even when patients had no symptoms and was independent of traditional cardiovascular risk factors such as smoking and diabetes.

Dr Puente said: "Our study suggests that one quarter of patients with rheumatoid arthritis and no symptoms of heart disease could have a heart attack without prior warning."

ICNC is organised by the Nuclear Cardiology and Cardiac CT section of the European Association of Cardiovascular Imaging (EACVI), a registered branch of the European Society of Cardiology (ESC), the American Society of Nuclear Cardiology (ASNC), and the European Association of Nuclear Medicine (EANM). ICNC 12 is held 3 to 5 May 2015 in Madrid, Spain.

Dr Puente said: "Rheumatoid arthritis affects 1.6% of the general population and is the first cause of consultation in the rheumatology service. The condition nearly doubles the risk of a heart attack but most patients never knew they had heart disease and were never alerted about their cardiovascular risk."

The study investigated the presence of ischaemia and infarction secondary to atherosclerotic disease (coronary artery disease) in 91 patients with rheumatoid arthritis and traditional cardiovascular risk factors but no symptoms of heart disease. Inflammatory markers, rheumatoid arthritis disease activity and risk factors were measured in all patients. Existence of ischaemia and infarction were assessed using the nuclear cardiology method Gated Single Photon Emission Computed Tomography (SPECT).

The researchers found that 55% of patients had dyslipidemia (high blood lipids), 32% had hypertension, 14% were smokers and 10% had type 2 diabetes. Nearly one quarter (24%) of patients had abnormal Gated SPECT, indicating ischaemia or infarction. There was no significant correlation between the presence of ischaemia or infarction and rheumatoid arthritis disease activity, inflammatory markers or cardiovascular risk factors.

Dr Puente said: "Our study shows that one quarter of patients with rheumatoid arthritis and no symptoms of heart disease do have coronary heart disease, as evidenced by the presence of myocardial ischaemia or infarction in the Gated SPECT study. This means they are at increased risk of cardiovascular death."

She added: "The ischaemia and infarction may be explained by the persistence of the systemic inflammation in rheumatoid arthritis which may cause an accelerated atherosclerosis process. Our finding of no association between the Gated SPECT results and inflammatory markers could be because all the patients were taking pharmacological treatment."

Patients in the study were 90% women and 59 years old on average and had a similar frequency of cardiovascular risk factors as the general population. Dr Puente found that the presence of ischaemia or infarction was independent of cardiovascular risk factors.

She said: "The results highlight the importance of conducting diagnostic tests in patients with rheumatoid arthritis to see if they have cardiovascular disease, specifically atherosclerotic coronary artery disease (ischaemia or myocardial infarction) even if they have no symptoms and regardless of whether they have cardiovascular risk factors. This is essential to prevent and reduce cardiovascular mortality."

Dr Puente concluded: "Patients with rheumatoid arthritis should be told that they have an elevated predisposition to heart disease and need pharmacological treatment to diminish the inflammatory process and atherosclerotic complications. They also need advice on how best to control their rheumatoid arthritis and decrease their cardiovascular risk factors. Patients who take corticosteroids and methotrexate for their rheumatoid arthritis are susceptible to elevated plasma lipid levels and develop hyperhomocysteinemia, respectively, which are both cardiovascular risk factors and require preventative treatment."

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Source:  
European Society of Cardiology

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