Study suggests siblings of people with RA are at increased risk of acute coronary syndrome
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The results of a study presented today at the Annual European Congress of Rheumatology (EULAR 2018) demonstrate an increased risk of acute coronary syndrome (ACS) in siblings of individuals with rheumatoid arthritis (RA), suggesting shared susceptibility between the two diseases.

RA is a chronic inflammatory disease that affects a person's joints, causing pain and disability. It can also affect internal organs. RA is more common in older people, but there is also a high prevalence in young adults, adolescents and even children, and it affects women more frequently than men.

"We welcome these results as they contribute to our understanding of cardiovascular risk in patients with rheumatoid arthritis," said Professor Thomas Dörner, Chairperson of the Abstract Selection Committee, EULAR. "This is important because cardiovascular disease is the main driver for the increased morbidity and mortality seen in patients."

ACS is an umbrella term used to describe a range of conditions associated with the sudden, reduced blood flow to the heart such as a heart attack or unstable angina. Recent studies have demonstrated that severity of RA disease is associated with the risk of ACS, suggesting that it is the RA disease itself contributing to the excess risk.

A recently published report demonstrated that despite more efficient control of inflammation in RA during recent years, the excess risk for ACS among patients with RA compared to the general population remains elevated. This suggests there may be a shared susceptibility between the two conditions. To examine this, study authors investigated the risk of ACS in siblings of individuals with RA. If there were shared susceptibility between the two conditions, non-RA siblings would also have an increased risk of ACS due to their similar genetic set-up and background.

"Our results provide evidence of shared susceptibility between RA and ACS," said Dr. Helga Westerlind, Karolinska Institutet (study author). "Although the nature of this needs to be further investigated, we believe that to bring down the cardiovascular risk in patients with RA, cardio-preventive measures must go beyond optimised RA disease control."

Results showed that patients with early RA and their siblings were 44% and 23% more likely to suffer from an ACS event than matched comparator subjects from the general population. A direct comparison of patients with RA to their siblings demonstrated that those with RA had a 19% higher risk of ACS than their siblings.

This Swedish Rheumatology Quality (SRQ) register is linked to the Swedish Multigeneration Register, Patient Register, the Cause of Death register, and the Total Population Register. Through this, investigators identified 7,492 patients with RA from the SRQ (1996-2015) who had 10,671 full siblings, the patients with RA were matched for age and gender with 35,120 comparator subjects along with their 47,137 full siblings.


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