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Editorial

Is there a link between arthritis and heart disease?

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Abstract

Globally, Cardiovascular Diseases (CVD) is causing an increase in morbidity and mortality. They impose a significant economic burden, particularly in low- and middle-income nations. Lowered modifiable risk factors such as hypertension, diabetes, hyperlipidemia, and poor lifestyle variables (alcohol use, cigarette smoking, physical inactivity, and so on) are keys to preventing CVD. C-reactive protein (CRP), a biomarker associated to hemostasis and inflammation, has a high predictive value for CVD.

INTRODUCTION

Arthritis refers to a group of rheumatic diseases and disorders that affect the joints and connective tissues around them. The cardinal signs of arthritis include inflammation, pain, redness, and stiffness in and around one or more joints. According to the 2003 National Health Interview Survey, 25% of adults in the United States will be diagnosed with arthritis by 2030, with an estimated 37% experiencing arthritis-related activity limits.

Inflammatory biomarkers, particularly CRP, are linked to cardiovascular risk in arthritis patients' disease activity and severity. Inflammatory cells release interleukin-6 (IL-6) which regulates CRP expression. CRP may play a role in the initiation and progression of atherosclerotic lesions, contributing to the development of cardiac ischemia syndromes, according to evidence. As a result, rheumatoid arthritis patients have a higher rate of cardiovascular morbidity, and cardiovascular risk factors like smoking, hypertension, and obesity are overrepresented among patients with chronic rheumatic disorders as compared to the general population.

Inflammatory biomarkers may be able to influence the link between arthritis and CVD, although their physiological significance is unknown. It's also plausible that arthritis is a standalone risk factor for cardiovascular disease. As a result, it's critical to look into the link between arthritis and CVD in order to help minimize CVD-related morbidity and death by enhancing arthritis control techniques.

There are significant gender differences in CVD and arthritis. In general, men develop CVD 7 to 10 years before women. Sex differences play a crucial influence in the metabolic syndrome and inflammatory

response, as well as in the development of CVD. Women, on average, have more inflammatory disease activity, report more severe symptoms, and have a higher percentage of job disability, but men have higher mortality rates than women. Also, women are more likely than men to have arthritis; 60 percent of people with arthritis are women, and most forms of arthritis, such as osteoarthritis, rheumatoid arthritis, and fibromyalgia, are more common in women; however, gout is more common in males. Experts aren't sure why women are more likely than men to acquire most types of arthritis, or why men are more likely to develop gout. Though both men and women are at risk for CVD, some risk factors may be more widespread and/or substantial in one gender than the other; for example, diabetes may be a greater risk for certain forms of CVD in women. Women are also more likely than men to acquire CVD later in life. As a result, it's possible that the link between CVD and arthritis differs by gender (effect modification by sex).

Despite the fact that the link between arthritis and cardiovascular disease is well documented in the literature, there is a gap in CVD risk management among people with arthritis in both Europe and the United States. Patients with rheumatoid arthritis are less likely than the general population to benefit from CVD prevention methods. The systematic evaluation tools of CVD risk among individuals with rheumatoid arthritis are underutilized by healthcare practitioners. In fact, a cardiologist, a rheumatologist, and a primary care provider are usually part of the interdisciplinary team that manages CVD risk in patients with rheumatoid arthritis, and there is often confusion among them about who should evaluate CVD risk factors and provide related lifestyle recommendations and medical interventions. It's critical to incorporate our findings into the everyday clinical practices of physicians who serve patients with inflammatory arthritis in order to improve primary CVD preventive care for these individuals.