Background: Rheumatoid arthritis (RA) is a chronic immune mediated systemic disease known to affect multiple organs. It is known that cardiovascular disease accounts for nearly half the mortality among RA patients.1,2,3 Osteoarthritis (OA), on the other hand, is not an inflammatory arthritis. No prior study has compared the prevalence of cardiovascular disease (CVD) among these two groups of patients.

Objectives: The purpose of this study was to compare the prevalence of CVD among U.S. veterans with RA versus those with OA.

Methods: The study was conducted in a metropolitan Veterans Affairs Medical Center in the U.S. Information was collected from 125 consecutive patients with RA and 125 consecutive patients with OA as they presented to the clinic. Patient characteristics were noted as well as the presence of CVD and certain subgroups: Cardiac arrhythmias4, coronary artery disease (CAD), congestive heart failure (CHF), cerebrovascular accident (CVA), abdominal aortic aneurysm (AAA), peripheral vascular disease (PVD), deep vein thrombosis (DVT), pulmonary embolism (PE), or any other form of embolism. The chi square test and the mann-whitney test were used for statistical analyses.

Results: Patient characteristics did not differ between the two groups for age, smoking status, or for the presence of hypertension or diabetes. There were more women in the RA group. The OA group had a higher BMI and a higher prevalence of hyperlipidemia. RA patients compared to OA patients had a higher incidence of CVD as a whole (60% vs. 42%, p < 0.004) and of cardiac arrhythmias (33.6% vs. 13.6%, p = 0.001). There was no difference between the 2 groups for the incidence of CAD, CHF, CVA, AAA, PVD or DVT/PE. RA seropositive and seronegative patients did not differ in the prevalence of CVD. RA duration was not related to the increased prevalence of CVD. Among the cardiac arrhythmias, patients with RA had a higher prevalence of atrial fibrillation (19.2% vs. 8.8%, p < 0.03), and arrhythmias requiring pacemaker or defibrillator implant (12.8% vs. 4.0%, p < 0.02).

Conclusion: The findings of this study demonstrate that our patients with RA have a statistically higher prevalence of CVD compared to OA patients. Among the subgroups, RA patients had a higher prevalence of cardiac arrhythmias, specifically atrial fibrillation and arrhythmias requiring pacemaker or defibrillator implant.

References:

Disclosure of Interests: None declared
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