

Alcohol consumption lowers risk of developing several arthritic conditions

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Alcohol consumption is associated with a significantly reduced risk of developing several arthritic conditions including Rheumatoid Arthritis (RA), Osteoarthritis (OA), reactive arthritis, psoriatic arthritis and spondylarthropathy, according to results of a new study presented today at EULAR 2010, the Annual Congress of the European League Against Rheumatism in Rome, Italy. Regardless of the type of arthritis, all patients reported drinking less alcohol than controls, leading to questions around the inflammatory pathways behind the effects seen.

In this Dutch study, alcohol consumption was associated with a significantly lower risk of developing RA (Odds Ratio (OR) 0.27 (0.22-0.34), Osteoarthritis (OR 0.31, (0.16-0.62), spondylarthropathy (OR 0.34, 0.17-0.67), psoriatic arthritis (OR 0.38, 0.23-0.62), and reactive arthritis (OR 0.27, 0.14-0.52). A particularly protective effect was shown in the RA population with the presence of Anti-Citrullinated Protein [Antibodies](#) (ACPA, potentially important surrogate markers for diagnosis and prognosis in RA), (OR 0.59, 0.30-0.99).

Interestingly, researchers also found that the degree of systemic inflammation in patients was shown to increase as the amount of alcohol consumed decreased ($p=0.001$) and that there was no dose response relationship (low 0.12 (0.08-0.18), moderate 0.46 (0.36-0.59), high 0.17 (0.12-0.25)) between the amount of alcohol consumed and the risk of arthritis development. Researchers hypothesise that there could be two explanations for this inflammatory effect; either that patients with more severe disease activity consume less alcohol due to associated changes in

their lifestyle, or that the presence of alcohol in the system could protect against the development of systemic inflammation.

"We know from previous research that alcohol consumption may confer a protective effect against developing RA, our data have shown that this effect may apply to other arthritic conditions too," said Dr Annekoos Leonoor Huidekoper, Leiden University Medical Centre, Netherlands and lead author of the study. "What intrigues us now is that the findings related to [systemic inflammation](#), further research into the inflammatory pathways involved is needed to determine the exact nature of the association."

Patients with arthritic conditions (n=997; RA n=651, reactive arthritis, spondylaropathy or psoriatic arthritis n=273, [osteoarthritis](#) n=73) were enrolled from the Leiden Early [Arthritis](#) Cohort and healthy controls (n=6,874) recruited from the Multiple Environmental and Genetic Assessment of risk factors for venous thrombosis study. Alcohol consumption was recorded at baseline (units per week), and the effect of [alcohol consumption](#) on risk of disease development was analysed by univariate and multivariate logistic regression (statistical tests that predict the probability of an event occurring). Odds ratios and confidence intervals (95%) were adjusted for age, sex, Body Mass Index (BMI) and smoking.

Professor Paul Emery, President of EULAR and arc Professor of Rheumatology, Leeds Institute of Molecular Medicine, University of Leeds, UK said: "These are very interesting findings but we should assert the need for caution in the interpretation of these data. Alcohol should be consumed in moderation, with consideration for local public health recommendations. A number of social and medical problems are associated with increased consumption of alcohol; therefore any positive implications of its use must be understood within the wider health context."

Provided by European League Against Rheumatism

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