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Lung diseases linked to higher rheumatoid arthritis risk

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Asthma and chronic obstructive pulmonary disease (COPD) were each associated with increased risk for developing rheumatoid arthritis in a study published in *Arthritis & Rheumatology*.

Inflamed airways may contribute to the development of rheumatoid arthritis, but the role of chronic airway diseases in the development of rheumatoid arthritis is unclear. In this study of 205,153 women, the researchers identified 15,148 women with asthma and 3,573 with COPD as well as 1,060 women who later developed rheumatoid arthritis over a median follow-up of approximately 24 years.

Asthma was associated with a 53% higher risk of rheumatoid arthritis, and COPD was associated with an 89% higher risk, after adjusting for factors including smoking. The association was particularly strong between COPD and the seropositive form of rheumatoid arthritis, which is characterized by elevated blood levels of antibodies thought to cause arthritis-related symptoms.

"These findings support the paradigm that chronic airway mucosal inflammation contributes to the development of rheumatoid arthritis," said first author Julia A. Ford, MD, of Brigham and Women's Hospital. "It is possible that inflamed airways may be a site of antibody production prior to the clinical onset of joint inflammation," added senior author Jeffrey A. Sparks, MD, MMSc. "Patients with asthma or COPD may be susceptible to rheumatoid arthritis, and clinicians should consider monitoring them for arthritis-related signs and symptoms."

More information: *Arthritis & Rheumatology*, DOI: 10.1002/art.41194