Reducing dementia in patients with rheumatoid arthritis

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The incidence of dementia in patients with rheumatoid arthritis is lower in patients receiving biologic or targeted synthetic disease modifying antirheumatic drugs (DMARDs) than in patients who receive conventional synthetic DMARDs, according to a new study. The study was presented at the virtual annual meeting of the American College of Rheumatology.

"Being on a biologic or targeted synthetic DMARD actually decreased your risk of incidence of dementia by 17% compared to patients who were on a conventional synthetic DMARD only," said lead study author Sebastian Sattui, MD, MS, a rheumatology fellow at Hospital for Special Surgery (HSS) in New York City. The study was done in collaboration with investigators from Weill Cornell Medicine and the University of Alabama at Birmingham.

Dr. Sattui said that the treatment in patients with rheumatoid arthritis has become more complex based on the understanding that rheumatoid arthritis has an impact well beyond what are thought of as the classical manifestations. Previous studies have suggested that inflammatory diseases such as rheumatoid arthritis can increase the risk for dementia and that TNF agents may have a role in preventing the incidence of dementia.

In the new study, researchers identified a cohort of patients with rheumatoid arthritis in Medicare claims data from 2006 to 2017. To be eligible, patients had to have continuous enrollment of at least 12 months

in Medicare Part A, B and D, be at least 40 years of age and have no prior diagnosis of dementia.

In the sample of 141,326 eligible patients with rheumatoid arthritis, the crude incident rate of dementia was 2.0 per 100 person-years for patients on conventional synthetic DMARDs and 1.3 for patients on any biological DMARD. After adjusting for factors such as age, sex and other comorbidities, patients on biologic or targeted synthetic DMARDs had an adjusted 17% lower risk for dementia than patients on conventional synthetic DMARDs. No significant differences were observed between the different classes of biologic or targeted synthetic DMARDs, suggesting that decreased risk is possibly explained by the overall decrease in inflammation rather than a specific mechanism of action.

The researchers say clinicians should factor this new information into treatment decisions, but prospective studies are needed. "Our work shows yet another dimension in which treatment of rheumatoid arthritis can impact the overall health and quality of life of our patients," said Dr. Sattui. "Rheumatoid arthritis is a systemic disease and it can have cognitive implications. However, these complications seem to share similar pathways to those of articular disease, and the medications that we use to treat rheumatoid arthritis could be effective in the prevention of dementia in patients with rheumatoid arthritis. Future studies need to assess the impact of the interventions, such as the treat-to-target strategy, on the incidence of dementia in patients with rheumatoid arthritis."

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