MedicalXpress

Researchers find combined therapy for RA may help speed remission

August 22 2019, by Heather Wilson

Researchers at the University of North Carolina Chapel Hill and RTI International (RTI), a nonprofit research institute, recently found that patients with early rheumatoid arthritis (RA) may see less disease activity and higher remission rates after biologic therapy plus methotrexate (MTX) rather than either treatment alone.

The results of their systematic review have been published in the *Journal of General Internal Medicine*.

RA is an autoimmune disease affecting more than 1 million people in the United States. It is characterized by joint inflammation, which can lead to progressive bone erosion, joint damage, and disability. Current guidelines recommend early treatment for RA patients, with the goal of remission. "Early" is usually defined as the first year of the condition, which is also how it was defined for the systematic review.

Available therapies for RA include corticosteroids, conventional synthetic disease-modifying antirheumatic drugs (csDMARDs, such as MTX), tumor necrosis factor (TNF) and non-TNF biologics, targeted synthetic DMARDs (tsDMARDs), and biosimilars.

"The 2015 ACR guideline conditionally recommends DMARD monotherapy first in patients with moderate to severe early disease and strongly recommends it for mild disease," said Katrina Donahue, MD, MPH, vice chair of research in the department of family medicine and first author of the paper. "Right now, biologics are generally prescribed

after DMARD (usually MTX) failure. However, our systematic review of the research suggests that combined therapy may actually provide patients a greater shot at remission without any additional side effects."

Donahue and her team looked at data from studies on early RA from 2006-2017. They identified 22 eligible studies with 9,934 participants. They found:

- Combination therapy with tumor necrosis factor (TNF) or non-TNF biologics plus MTX improved disease control, remission, and day-to-day function compared with monotherapy with either MTX or a biologic.
- Network meta-analyses found higher ACR50 response (50 percent improvement) for combination therapy with biologics plus MTX than for MTX monotherapy.
- Combination therapy with biologics plus MTX did not lead to higher rates of serious adverse events or treatment discontinuation due to adverse events than monotherapy with either MTX or a biologic.

"Our study lends support to the use of early combination therapy in patients with moderate to severe disease who do not have an early or robust response to DMARD monotherapy," said co-author Beth Jonas, MD, Reeves Foundation Distinguished Professor and chief of the division of rheumatology, allergy, and immunology in the department of medicine at the UNC School of Medicine. "In some cases, such as in patients with the most aggressive disease, initial treatment with a combination of MTX and a biologic might be considered."

The study does have some limitations. Because the trials they studied enrolled mostly patients with very high disease activity, the data may be less meaningful to patients with milder cases of RA. Available data also did not allow conclusions to be drawn for other patient subgroups based

on demographics, serious comorbid conditions, or prior therapy. Additionally, there were no eligible data on biosimilars, which are a fairly new treatment.

"In future studies, researchers will need to include patients at different stages of disease activity," says Donahue. "We also need more studies with longer treatment periods and follow-ups. Those data would help us understand how starting with a biologic improves long-term prognosis of RA."

Provided by University of North Carolina at Chapel Hill School of Medicine