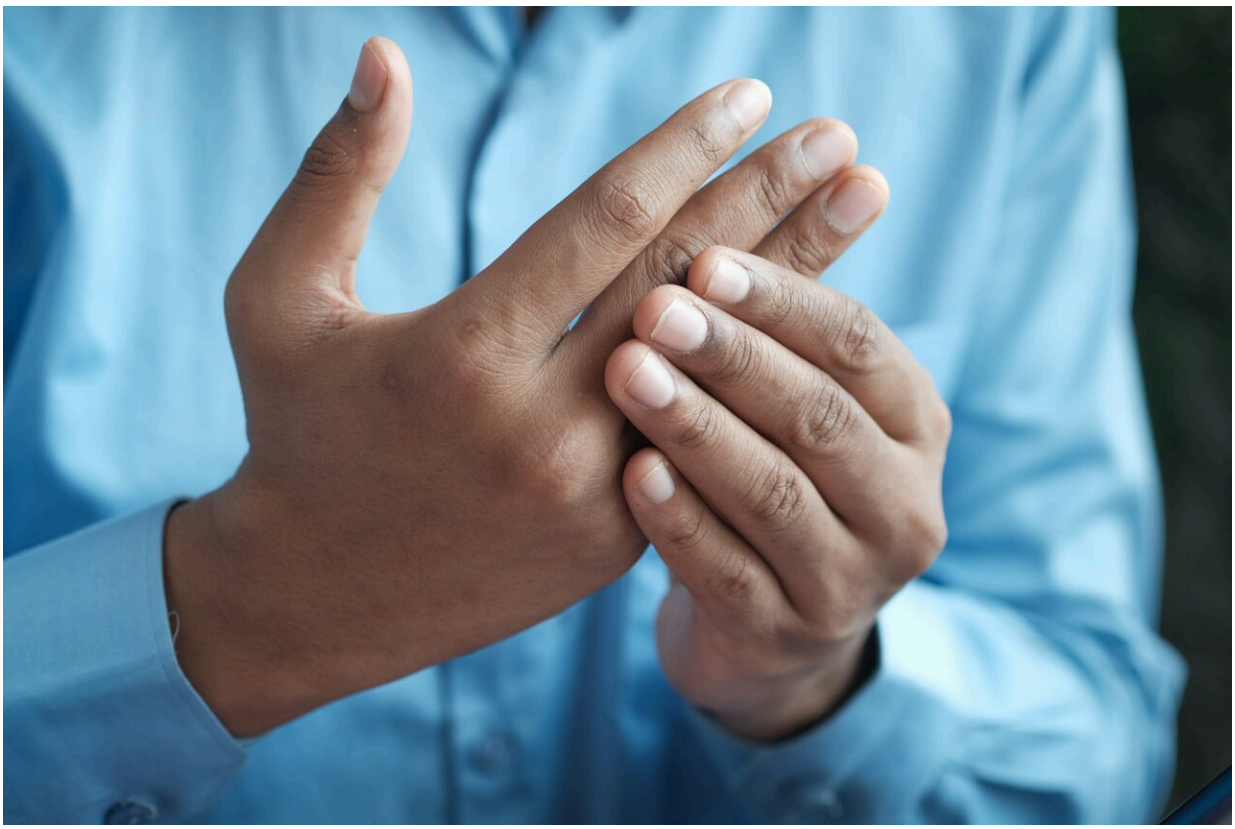
Study finds tapering TNF inhibitors increases flares, lowers Boolean remission rates for RA patients in remission

November 10 2023



Credit: Unsplash/CC0 Public Domain

New research at ACR Convergence 2023, the American College of Rheumatology's (ACR) annual meeting, has found that rheumatoid

arthritis (RA) patients in sustained remission who stopped TNF inhibitors (TNFi) had significantly more flares and lower Boolean 2.0 remission rates compared with those who continued treatment.

Boolean 2.0 is a revised definition for evaluating disease activity in RA that classifies more patients as achieving remission than Boolean 1.0. It is endorsed by the American College of Rheumatology and the European Alliance for Associations in Rheumatology (EULAR).

As more RA patients achieve sustained remission, questions remain about the long-term effectiveness of tapering and stopping treatment with TNFi. In the randomized, multicenter, non-inferiority ARCTIC REWIND trial, Siri Lillegraven, MD, MPH, Ph.D. at Diakonhjemmet Hospital, Oslo, Norway, and colleagues compared the three-year effect of tapered versus stable treatment on RA patients in sustained remission. It follows a previous year-long trial.

The current trial included 92 patients from Norwegian rheumatology centers who were randomized 1:1 to taper TNF inhibitors to withdrawal or continue treatment. All had study visits every four months throughout the three-year study period.

Patients restarted full-dose therapy if they experienced a flare, which was defined as loss of remission plus a 0.6 units or greater increase in the disease activity score and two or more swollen joints. In lieu of these criteria, a doctor and patient could agree that a significant flare had occurred. The trial also looked at remission status, medication use, and serious side effects or complications.

Of the original 92 patients, 80 (87%) completed the three-year follow-up. By the trial's end, 75% of patients in the taper group experienced a flare versus 15% in the stable group. Most of those who flared were in remission by their next office visit (81% in the taper group and 67% in

the stable group), although the taper group had significantly lower Boolean 2.0 remission rates throughout the study.

Lillegraven says the researchers were "somewhat surprised by the difference in how many patients were in ACR/EULAR Boolean remission in the two groups," noting that "although most patients in the tapering group flared within the first year and reinstated previous full-dose treatment, Boolean 2.0 remission rates were significantly lower in the tapering TNFi group than the stable group throughout the study period."

She says, "The risk difference for flares observed in these data [-24% over three years] is quite comparable to that observed in the one-year study. That is a little surprising, as we might have expected more of the patients on stable treatment to develop a flare over time, reducing the difference between the two groups."

Lillegraven notes that the study's open label design might influence the evaluation of flares but says study personnel were "continuously instructed about the importance of recording flares in a similar manner in both groups, a pragmatic approach that mirrors clinical care where patients know what treatment they are receiving."

Lillegraven says her team has many studies planned to better understand how treatment for RA patients in remission can be personalized. This includes factors that would help identify which patients should and should not taper their treatment.

"We have started planning a 10-year follow-up of the study to better understand the long-term outcome of different treatment strategies in RA remission. We are [also] considering studies to better understand patient preferences with regard to medication tapering."

Shared decision making is central to any consideration of tapering, she says.

"The patient should be informed of the risks and benefits of tapering, and the total situation of the patient should be taken into account before the decision is made. Although the data do not support tapering TNFi at a group level, factors such as adverse events related to treatment or the patient having a strong preference toward tapering will naturally influence such a decision."

More information: Abstract #L07: 3-year Results of Tapering TNFi to Withdrawal Compared to Stable TNFi Among Rheumatoid Arthritis Patients in Sustained Remission: A Multicenter Randomized Trial

Provided by American College of Rheumatology