

There may be a potential window of opportunity for early treatment in rheumatoid arthritis

The concept of ‘early’ treatment in rheumatoid arthritis has become increasingly popular, but up until now there has been no evidence for how long the window for early treatment is open.

INTRODUCTION

Rheumatoid arthritis is a chronic inflammatory disease that affects a person’s joints, causing pain and disability. Many studies have suggested that treatment and interventions should target disease in the early stages to help prevent disability and long-term damage to the joints.

WHAT DID THE AUTHORS HOPE TO FIND?

It was already known that patients with rheumatoid arthritis do better when their treatment is started early. However, it was not known whether it would always be better to treat earlier rather than later at any point in the disease and that this would correlate with better outcomes for patients (called a linear hypothesis), or whether there is a defined time frame during which early treatment will work, a so-called window of opportunity (the non-linear hypothesis). The authors hoped to find out which of these hypotheses was true.

WHO WAS STUDIED?

The study included 1271 patients with rheumatoid arthritis who received disease-modifying antirheumatic drugs (DMARDs) early in their disease and were then monitored for 5 years. At the start of treatment all patients were aged 18–70 years, and had had a diagnosis of rheumatoid arthritis for between 6 weeks and 6 months.

HOW WAS THE STUDY CONDUCTED?

This was a longitudinal observational study, which means that the researchers simply observed and recorded information at several time points about the people in the study. A study of this type is used to compare different groups of people over a period of time, without changing any variables.

The patients were followed up for 5 years in the study, with measurements taken once a year. The authors recorded two main outcomes. The first was whether patients could stop taking their medicine for a period without the disease flaring (DMARD-free remission). The secondary outcome was whether there was any evidence of the disease damaging the joints (radiographic progression). These outcomes were analysed in relation to the symptom duration at the start of treatment in order to see what the outcomes were for patients who were treated early or late in their disease.

WHAT WERE THE MAIN FINDINGS OF THE STUDY?

The study found that patients who had already had symptoms for a long time before they started treatment had a lower chance of DMARD-free remission and a higher chance of radiographic progression. Importantly, the relationship between these two outcomes and the duration of symptoms was not linear. This suggests that in the first few months after patients experience initial symptoms of rheumatoid arthritis, early treatment is likely to give better results. But if a patient has had prolonged symptoms then the effect of delay in treatment with DMARDs is important. As such, there does seem to be a window of opportunity of around 20 weeks in people with rheumatoid arthritis when early treatment will be effective, and this might be very different to what is seen in other diseases.

ARE THESE FINDINGS NEW?

Yes, this is the first evidence that a window of opportunity exists for rheumatoid arthritis patients.

HOW RELIABLE ARE THE FINDINGS?

There are some limitations in the study. In both groups the onset of symptoms was defined as being when they were first noticed by patients themselves, and this might not be accurate due to the difference between individuals and their ability to notice or remember certain events. Another issue is that as this was a longitudinal observational study, patients could stop and start their medicine at any time and were not subject to the strict rules of a randomised clinical trial.

The authors are confident that the findings are reliable, but they acknowledge that they do not allow us to draw definite conclusions about the time frame during which early treatment is useful in patients with rheumatoid arthritis.

WHAT DOES THIS MEAN FOR ME?

It is very important for patients with rheumatoid arthritis to be diagnosed and to receive treatment as early as possible. This is a simple way to have a higher chance of a better disease outcome. If you are worried you may have rheumatoid arthritis, you should speak to your doctor.

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