

Early remission or low disease activity can increase the likelihood of better outcomes



There is a link between a person's disease activity and the worsening of their functional limitations and need for long-term orthopaedic surgery.

INTRODUCTION

Rheumatoid arthritis is a chronic inflammatory disease that affects a person's joints and sometimes their internal organs, causing pain and disability. It is more common in older people, and affects both men and women.

Since there is currently no cure for rheumatoid arthritis, treatment aims to help people get into remission or at least to have low disease activity. This is called the treat to target strategy (sometimes shortened to T2T). Being able to get into remission or low disease activity early in your disease is more likely if you receive an effective treatment promptly. Some countries and healthcare systems are able to provide this quick treatment. However, some systems restrict the use of the most effective treatments (the biologic disease-modifying anti-rheumatic drugs, also called bDMARDs) or biologics) to patients with high disease activity levels only because they can be very expensive.

WHAT DID THE AUTHORS HOPE TO FIND?

The authors wanted to understand how a person's functional ability (for example, being able to undertake normal activities of daily life) and joint destruction (as measured by the need for joint surgery), relate to their different disease activity levels between the first and fifth year after starting treatment for their rheumatoid arthritis.

WHO WAS STUDIED?

The study involved over 2000 people with rheumatoid arthritis in two very large studies in the UK. Everyone taking part had been diagnosed with the disease within 3 years of the onset of their symptoms. The studies took place between 1986 and 2012 from clinics across England, Wales and Ireland. People received treatment and medicines according to the normal care that would be given in their clinic.

HOW WAS THE STUDY CONDUCTED?

The study used data from existing databases. There was no study intervention or medicine being tested. People with rheumatoid arthritis tend to be seen at their clinics regularly – for as many as 25 years from the time they are first diagnosed, so it is possible to explore symptoms and features that people had early in their disease, and compare these with how they did later on.

There were two databases developed as part of the study. These were linked to three other national databases, which improved the quality of the data being looked at. When they were looking at the data, the authors put surgical procedures into one of two groups, depending on the joint type and procedure. 'Major' procedures were those involving a large joint (such as the hips, knees) or joint replacements. 'Intermediate' procedures mainly involved people's wrists, hands or feet. People's functional ability was measured using a questionnaire that asked about typical daily activities, such as being able to walk and get dressed without help. This helped the authors to see how people's abilities changed over time.

WHAT WERE THE MAIN FINDINGS?

The study found that people with rheumatoid arthritis in remission had no change in their functional ability over five years. People with worse or higher disease activity and poor functional ability early on also had quicker functional decline between years 1 and 5. There was no difference in functional ability in people with either low disease activity and those in remission. People with moderate or high disease activity states had a higher risk of needing both intermediate and major surgery.

ARE THESE FINDINGS NEW?

The consequences of moderate disease activity on functional ability and the need for orthopaedic surgery have not been examined in this much detail before. The way the study linked into the three national datasets makes it unique, and means the quality and accuracy of the results are very good.

ARE THERE ANY LIMITATIONS?

It is not possible to draw conclusions about cause and effect from this type of study. That means we cannot say whether different types of treatment that people used had an impact on their functional abilities or the types of joint surgery that they needed.

WHAT DO THE AUTHORS PLAN ON DOING WITH THIS INFORMATION?

The authors plan to look in greater detail at people who are classed as being in low disease activity or remission. They will look at specific differences in outcomes for these people, including their functional ability or need for joint surgery.

WHAT DOES THIS MEAN FOR ME?

If you have been diagnosed with rheumatoid arthritis, it is important to try to keep your disease in remission, or at least in a low disease activity state. Being in higher disease activity may worsen your function and increase your risk of joint damage, eventually meaning you need to have surgery on your joints. Having early and intensive treatment and treating to a target of remission or at least low disease activity can increase the likelihood of better outcomes.

If you would like to know more about treating to target and ways to achieve remission, you should speak to your doctor.

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