



Using ultrasound to inform treatment decisions in people with stable (symptom-free) rheumatoid arthritis

What is rheumatoid arthritis?

Rheumatoid arthritis is a chronic illness that causes inflammation, particularly of the joints. This inflammation leads to chronic pain, stiffness and joint damage.

Up to 40% of people with rheumatoid arthritis become symptom-free within 6 months of starting treatment. People with stable/symptom-free rheumatoid arthritis may not need to continue taking medication. However, there is a risk that people who stop taking medication will have a relapse (develop symptoms again).

What is an ultrasound scan?

An ultrasound scan is a procedure that uses high-frequency sound waves to create an image of part of the body.

What we did

We looked for answers to two questions:

- 1. Can ultrasound help predict future joint damage in people with stable/symptom-free rheumatoid arthritis?
- 2. Can ultrasound help inform decisions on reducing and stopping treatment in people with stable/symptom-free rheumatoid arthritis?

What we found

In a review of seven studies, inflammation detected using ultrasound predicted long-term risk of relapse and future joint damage in people with stable/symptom-free rheumatoid arthritis.

Three small studies showed that ultrasound could identify people with stable/symptom-free rheumatoid arthritis who were suitable for reducing or stopping treatment. Ultrasound could also monitor patients who reduced or stopped taking medication to check for signs of relapse.

The information considered did not report any harms to people with stable/symptom-free rheumatoid arthritis who had an ultrasound.

No information was found about the value for money of using ultrasound in people with stable rheumatoid arthritis.

Future work

Research is needed to find out if using ultrasound in people with stable/symptom-free rheumatoid arthritis is good value for money. Research is also needed to find out which joints to check using ultrasound, and how often patients with stable/symptom-free rheumatoid arthritis should be offered a check-up.