Rheumatoid arthritis patients living with frailty may find their frailty is reversible following treatment, according to a new study.
The research, published in RMD Open and led by the University of Glasgow, looked at frailty—a vulnerability to poor health-outcomes—in people with rheumatoid arthritis (RA). The study used data from the UK Biobank and the Scottish Early Rheumatoid Arthritis Cohort, which includes people with newly diagnosed RA in Scotland.

The study found that frailty is common in people with rheumatoid arthritis, including in many younger people aged below 65, however the findings suggest that as people's rheumatoid arthritis was treated and became less active, their degree of frailty was also reduced.

While the study found that people with more severe or active rheumatoid arthritis are more likely to be identified as frail, and people with frailty were more likely to be admitted to hospital or die, early control of rheumatoid arthritis disease activity could help ameliorate frailty.

Dr. Peter Hanlon, Clinical Research Fellow at the University's Institute of Health and Wellbeing, said: "It's incredibly encouraging to see from our study that frailty can be reduced in people with rheumatoid arthritis, particularly in younger patients. We know that frailty can be reduced, but it can be challenging to identify people for whom this is possible."

"Our findings certainly indicate that some people with frailty and active rheumatoid arthritis have the potential to improve their frailty status with treatment of their RA. This knowledge is incredibly beneficial for clinicians when assessing people with RA and deciding on a broad approach to treatments; and also suggests care should be taken in applying a 'label' of frailty to people living with RA, given the potential to reverse this following treatment."

The study looked at people with RA identified from the Scottish Early Rheumatoid Arthritis (SERA) cohort (newly diagnosed, mean age 58.2 years) and UK Biobank (established disease, mean age 59 years).
Based on the frailty index, frailty was common in the SERA cohort (12% moderate, 0.2% severe) and the UK Biobank cohort (20% moderate, 3% severe).

Neha Issar-Brown, Director of Research at Versus Arthritis, said: "Rheumatoid arthritis (RA) can affect anyone of any age, and for some can take months, sometimes years, to get an accurate diagnosis. It is a debilitating and unpredictable disease, and if not treated and brought under control can cause disabling damage to joints and an increased risk of frailty and hospitalization.

"This research provides further clear evidence of the importance and very real benefit in people quickly finding the most effective treatment that will reduce the impact of RA and prevent it getting worse.

"It also underscores a key principle for Versus Arthritis research priorities—applying a holistic approach for people with arthritis, which includes the management of pain, mental health and fatigue, so they get the treatment that's right for them at the right time."

The paper, "Frailty in rheumatoid arthritis and its relationship with disease activity, hospitalization and mortality: a longitudinal analysis of the Scottish Early Rheumatoid Arthritis cohort and UK Biobank," is published in *RMD Open*.
