Balance training in rheumatoid arthritis

Review question
What is the effectiveness and safety of balance training in improving functional capacity of patients with rheumatoid arthritis?

Nursing implications
Patients with rheumatoid arthritis find their daily living activities are limited if their lower extremity joints are impaired. Another significant problem for these patients is they are at risk of falls because they have problems with their balance and posture.

Balance training aims to help people maintain balance when they have visual and other problems. Evidence has suggested that combining balance training with visual and auditory inputs can improve spatial perception, which may improve stability in body posture.

However, information about how effective and safe balance training is for patients with rheumatoid arthritis is limited.

Study characteristics
The review considered adults aged 18 years or older with a diagnosis of rheumatoid arthritis according to the 1987 American College of Rheumatology criteria. Randomised controlled trials or clinical controlled trials were considered for inclusion.

Balance training was defined as: “Exercises in which participants exercise their muscles against an external force (for example, unstable platforms) as a consequence of voluntary movement, or in response to an unexpected perturbation or stimulus in order to maintain the body’s centre of mass.”

The review considered only balance training that met the following criteria: duration over six weeks; frequency twice a week; and at least 30 minutes of each exercise session.

Interventions could be compared with an alternative intervention or no intervention.

The main outcomes of interest were general functional ability, gait and other functional measures, and self-reported pain.

Summary of key evidence
Despite existing evidence showing the effectiveness of balance training alone or in conjunction with other exercise programmes as a way of improving functional capacity in other patient populations, there was no evidence available to either support or discourage such interventions in patients with rheumatoid arthritis.

Of 864 studies identified in the database search, 17 reported general exercises in patients with rheumatoid arthritis as being the main intervention. None of the 17 studies investigated the effects of balance training alone, or in combination with other therapies. Consequently, no study was available to be included to answer the review’s objective.

The 17 studies included: balance training lasting less than six weeks and less than 30 minutes per exercise session; exercise programmes that targeted muscle strength and endurance (such as swimming, cycling, running or jogging); and progressive dynamic strength training.

Best practice recommendations
Currently, there is no evidence fitting the selected criteria available to support or discourage the use of balance training to improve the functional capacity of patients with rheumatoid arthritis. Therefore, clinical judgement should be used in considering the use of balance training, either alone or in conjunction with other therapies.

Further studies are required to investigate the effectiveness of balance training alone and to examine the increased number and duration of balance training sessions on improved functional ability in such patient groups. NT

The full review report, including references, can be accessed at tinyurl.com/coch-rheumatoid

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Reference

Erosion of knee joints from rheumatoid arthritis: such damage can affect stability