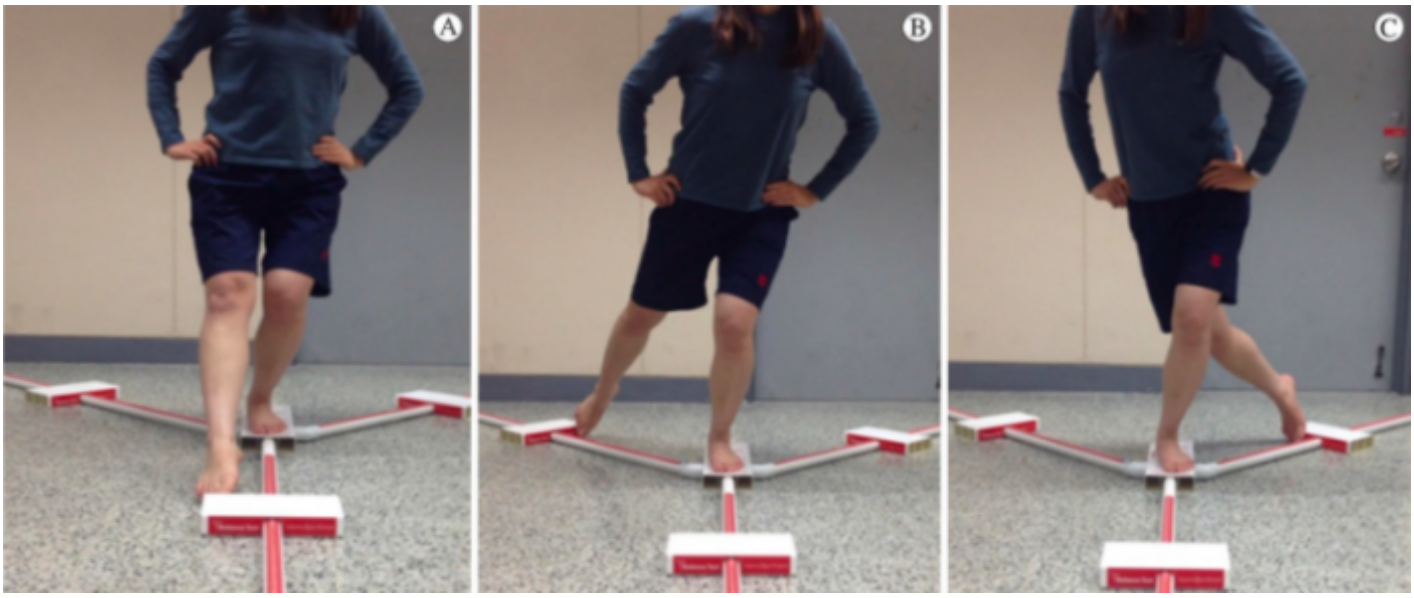
ANATOMY & PHYSIOTHERAPY
Helping you care

14 April 2021



Aging & Chronic Diseases

Improving balance in the middle-aged population

Is it important to improve and address postural stability, even in younger populations?

Author : Jessica Povall

Falls are a major cause of injury in the elderly population, and much of the current literature focuses on balance input for older populations. However, hip strength and associated balance starts to reduce in women between 40-60 years of age. This causes individuals to be regarded as at risk of falling at a significantly younger age.

For this reason, functional strengthening and balance input should also be considered for younger age groups, and not just for the elderly. This study investigated the impact of applying a modified version of the Otago Exercise Programme on dynamic balance measured with the Y-Balance Test.

This study included 52 participants (mean age: 54 years). The study period was eight weeks, with two four-week phases. Participants were randomly assigned into either the treatment or the control group. The treatment group received a modified version of the Otago Exercise Programme; the control group did not receive any exercises but were advised to continue with their current lifestyle routines.

The modified Otago Exercise Programme consisted of balance exercises, a.o.: single-legged stance, heel to toe walking and heel walking. Strength exercises, such as standing hip abduction and wall sits were also included.

The Y-Balance Test was used pre- and post-intervention to measure dynamic balance when reaching forward, sideways and backward. Over the course of the eight-week study, the intervention group showed a significant improvement on the Y-Balance Test, whereas the control group did not.

This study highlights the benefits of integrating a simple but effective balance and strengthening routine for middle-aged individuals, and its impact on overall dynamic balance.

Overall, this study provides good evidence supporting the incorporation of balance and strengthening exercises as part of therapeutic interventions for balance, even for patients who are middle-aged.

Expert opinion

This study highlights five exercises that are easily administered either at home or in a clinic setting. Balance and postural stability can be measured and evaluated easily using the Y-Balance Test.

The study is also of clinical relevance as it shows that balance can be improved even in those who are middle-aged. Clinicians should consider addressing balance in all age ranges, and not just in those who are over sixty and traditionally considered at higher risk of falling: strength and balance deficits can occur at much younger ages.