DOI: 10.7860/JCDR/2025/80478.21705

Impact of Subtalar and Talocrural Joint Mobilisation on Static Balance in Older Adults: A Study Protocol

Aditi Nagpal, Postgraduate Student, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, MM (DU), Mullana, Ambala, Haryana, India.
Kanu Goyal, Assistant Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, MM (DU), Mullana, Ambala, Haryana, India.
Manu Goyal, Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, MM (DU), Mullana, Ambala, Haryana, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Manu Goyal,

Professor, Department of Physiotherapy, Maharishi Markandeshwar Institute of Physiotherapy and Rehabilitation, MM (DU), Mullana, Ambala, Haryana, India.

E-mail: manu.goyal@mmumullana.org

Introduction: Balance begins to diminish gradually from midlife, generally at the age of 50 years. The ankle and foot structures are particularly significant because they serve as the body's foundation of support and transfer weight to the ground. However, regular age-related changes, such as diminished strength and restricted Range of Motion (ROM) resulting from musculature or joint complex degeneration, have an adverse effect on balance, changing gait patterns and increasing the likelihood of falls. In case of ankle arthrokinematics, it is clear that manual treatment based on mobilisation of joints techniques has become a significant tool for restoring the normal ROM and balance.

Aim: To determine the impact of subtalar and talocrural joint mobilisation on static balance in older adults.

Materials and Methods: Two group pretest- posttest experimental study will be conducted in a tertiary care setting. Participants will be recruited based on selection criteria. Participants will be divided into two groups - experimental and sham group (passive ROM) respectively. Four stage balance test and Balance Error Scoring System (BESS) will be recorded as outcome measure for static balance at baseline and post intervention (immediate after the session). Grade III Maitland accessory mobilisation, 3 sets of 30 repetitions with 60 sec intervals, will be performed bilaterally.

Keywords: Manual Therapy, Falls, Postural control, Ankle.