

# The evaluation of muscle strength, balance, gait and fatigue in patients with multiple sclerosis

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**Status** RECRUITING  
**Sponsor** University of Rzeszow  
**Enrollment** 90 participants

## Plain Language Summary

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Multiple sclerosis (MS) is a condition where the immune system attacks the brain and spinal cord, causing symptoms like muscle weakness, balance problems, difficulty walking, and fatigue. Understanding exactly how these symptoms relate to each other can help clinicians develop better treatment and rehabilitation approaches. This study measures strength, balance, walking ability, and fatigue in people with MS, and examines how these factors are connected depending on the severity of disability.

Participants undergo a series of standardised physical tests, including walking tests, balance assessments on a computerised platform, and isokinetic strength testing of the leg muscles. Fatigue is also measured using validated questionnaires. The study focuses on people with MS who are in a stable (non-relapsing) phase of their disease.

You may be eligible if you have a confirmed diagnosis of MS (in remission), are aged 25 to 60, score between 2 and 6 on the Expanded Disability Status Scale, and are able to walk independently — even with the help of a walking aid. You are not eligible if you are currently in a relapse, have significant cognitive impairment, or have other conditions affecting your gait or balance.

## Key Eligibility Criteria

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### Inclusion (1)

- Participants with Multiple Sclerosis (during remission), Expanded Disability Status Scale (EDSS) (2-6), able to walk independently (without assistance of other people, with orthopedic equipment if necessary).

### Exclusion (1)

- the period of disease relapse, cognitive impairment that hinders understanding and acting in accordance with instructions (Mini Mental Scale below 24), unstable medical condition, contractures and orthopedic diseases of the lower limbs, coexisting other diseases disturbing gait or body balance.

## Locations (1 total)

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Podkarpackie, Poland