2-Minute Walk Test (2MWT)

Assessment Overview

Assessment Area

ICF Domain:
Activity
Subcategory:
Mobility

You Will Need

Length:
2 minutes
Equipment:
- Countdown timer
- Tape measure
- Mechanical lap counter
- Cones to mark the turnaround
- Chair that can be easily moved along the walking course.

Scoring:
Total distance walked (rounding to the nearest meter) and the number and duration of rests during the test is reported.

Summary

The 2-Minute Walk Test (2MWT) assesses walking performance by measuring the distance a person is able to walk within 2 min.

The 2MWT is a measure of self-paced walking ability and functional capacity, particularly for those who cannot manage longer duration test like 6MWT.

The 2MWT is used as an outcome measure for patients with a variety of conditions and in multiple populations.

Availability

Worksheet: Can be found here.

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Standard Error of Measurement:
7.5 m (overall)
8.5 m (slow walkers)
7.3 m (fast walkers)

Minimal Detectable Change:
20.9 m (overall)
23.6 m (slow walkers)
20.3 m (fast walkers)

(Willi et al. 2023; n=50; 33 males, 17 females; mean (SD) age: 52.6 (16.3) years; ASIA A-D; 24 tetraplegia, 26 paraplegia; mean time since injury 6.11 years; 35m hallway)

Typical Values

Not established in SCI

Measurement Properties

Validity – **Moderate** to **High**

High correlation with 6-MWT:

r = 0.992

(Willi et al. 2023; n=50; 33 males, 17 females; mean (SD) age: 52.6 (16.3) years; ASIA A-D; 24 tetraplegia, 26 paraplegia; mean time since injury 6.11 years; 35m hallway)

High correlation with 10-MWT:

r = 0.932 - 0.964

Moderate to **High** correlation with WISCI II:

r = 0.571 – 0.749

(Willi et al. 2023; n=50; 33 males, 17 females; mean (SD) age: 52.6 (16.3) years; ASIA A-D; 24 tetraplegia, 26 paraplegia; mean time since injury 6.11 years; 35m hallway)

High correlation with SCI-FAI:

r = 0.688 – 0.805

High correlation with Berg Balance Scale:

r = 0.781

High correlation with TUG test:

r = -0.623

(Lemay & Nadeau 2010; n=32, 25 males, 7 females; mean (SD) age: 47.9 (12.8) years; ASIA D; tetraplegia and paraplegia; mean (SD) time since injury 77.2 (44.3) days)

Number of studies reporting validity data: 2

Reliability – **High**

High Test-retest Reliability:

ICC = 0.980

(Willi et al. 2023; n=50; 33 males, 17 females; mean (SD) age: 52.6 (16.3) years; ASIA A-D; 24 tetraplegia, 26 paraplegia; mean time since injury 6.11 years; 35m hallway)

Number of studies reporting reliability data: 1

Responsiveness

Floor/Ceiling Effect:
Not established in SCI

Effect Size:
Not stablished in SCI

Number of studies reporting responsiveness data: 0