Gait Velocity Assessment for Older Adults

Tools Needed: Marked 8 meter walkway, Stopwatch or watch with a second hand

Setup:
- Mark walkway at the START, and then mark STOP at 8 meters (26 feet).
- Add a marker 2 meters (6.6 feet) from the START and 2 meters before the STOP. These markers should be blind to the patient.

Instructions:
- Instruct the patient to walk at a “normal comfortable pace” from the START to the STOP
- Start recording 2 meters from the START, and Stop recording 2 meters before the track STOPS
- Record the number of seconds during the 4 meter timed zone

Interpretation/Calculation:
Gait Velocity = Distance/Time (meters/second)
= 4m / x seconds

Normal Gait Velocity: ≥ 0.8 m/s or ≤ 5 seconds on a 4 meter walkway

Slow Gait Velocity: < 0.8 m/s

Application:
- Gait speed less than 0.8 m/s is predictive of poor clinical outcomes such as cognitive decline, physical decline, hospitalization, nursing home placement, and falls.
- Patients with abnormalities in both clinical gait assessment (Gait Speed) and Self report are at increased risk for falls in comparison to patients without any abnormalities.
- Plan for cognitive assessment and fall prevention for patients with slow gait.
- Follow gait speed periodically to plan for interventions aimed at improving functional mobility.

References:
- Karpman C, Lebrasseur NK, Depew ZS, Novotny PJ, Benzo RP. Respiratory Care 2014
- Peel NM, Kuys SS, Klein K. Journal of Gerontology 2012

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