



GAIT ASSESSMENT

Gait abnormalities in older individuals is common and are commonly linked to falls and injuries.

The incidence of gait abnormalities remains high in the elderly. It is estimated that 15% of those over the age of 65, 35% of those over the age of 70 and 40% of those over the age of 85 suffer from gait abnormalities. Given the link between gait abnormalities and falls with injuries, elderly population should have their gait assessed regularly.

Basic Gait Cycle:

1. **Stance Phase** - Body weight shifted to a single limb as the contralateral limb is in swing phase. Consists of initial contact, loading response, mid stance and terminal stance phases.
2. **Swing Phase** - Enters as contralateral limb enters stance phase. Consists of initial swing, mid swing and terminal swing phases.

Assessment Tools:

1. **Get Up And Go Test** - The Timed Get Up And Go Test monitors a patient from sitting to standing position and then walking 3 meters, turns around and sits back down. Less than 20 seconds to accomplish is normal and indicates patient remains independent. Anything over 30 seconds however is placing the patient at high risk for loss of independence and falls.
2. **General Neurologic Exam** - Check cranial nerves (including visual fields/acuity), cerebellar (heel to shin/Rhomberg), neuropathy, proprioception (great toe sense, monofilament test, vibratory sense), musculoskeletal abnormalities.
3. **Balance** - Monitor balance while standing and when transferring. Use of hands to get out of chair or can stand without support? Ask the patient to stand with eyes closed for 30 seconds.
4. **Walking** - Observe gait. Pay attention to initiation of walking (hesitance or numerous attempts). Monitor step height, foot clearance, foot drop, symmetry and speed. Monitor for path deviation or use of hands (on wall, furniture, etc.).
5. **Endurance** - Monitor for signs of fatigue that may be contributing to gait instability.