

EVALUATION AND MANAGEMENT OF GAIT DYSFUNCTION IN MYELOPATHY

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I. Gait assessment: the starting point

- a. Gait assessment is the key to effective gait treatment in individuals with myelopathy. We will discuss a variety of tools that are recommended for use in this population.
 - i. Spinal Cord Injury Functional Ambulation Profile
 - ii. Walking Index for Spinal Cord Injury (WISCI II)
 - iii. 10-meter walk test
 - iv. 6-Minute Walk Test
 - v. Recommendations for physicians
- b. Gait analysis is a must for effective gait intervention selection. Options for gait analysis include:
 - i. Observational Gait Analysis
 - ii. Spatiotemporal gait analysis
 - iii. Kinematic gait analysis
 - iv. EMG

II. Gait treatment: the importance of doing the right thing!

- a. Rehabilitation of locomotion after SCI:
 - i. The role of the Central Pattern Generator (CPG)
 - ii. Plasticity in the spinal cord – implications for gait training
 - iii. Prognosis for gait recovery after SCI
- b. Treatment options
 - i. Locomotor therapies – manual body weight support, robotic training
 - ii. Aquatic therapies
 - iii. Functional electrical stimulation
 - iv. Other treatment options including novel assistive devices and tools such as cold laser
- c. Staying the course!
 - i. Encouraging patients to continue with activity even when progress is slow
 - ii. Importance of maintaining joint and muscle health as well as bone health and cardiovascular health

III. Videos will be used throughout the presentation to illustrate the concepts and to provide meaningful discussion points

References

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