Spinal Cord Injury Medicine: Rehabilitation outcomes

Abstract: This self-directed learning module highlights rehabilitation outcomes in spinal cord injury (SCI). It is part of the chapter on SCI medicine in the Self-Directed Physiatric Educational Program for practitioners and trainees in physical medicine and rehabilitation. This article focuses on the multiple concerns for functional recovery after SCI, chiefly, the potential for ambulation, upper–extremity recovery, options for functional neuromuscular stimulation (FNS), sexual activity, and optimal outcome after a metastatic lesion. Motor incomplete patients have a better prognosis for ambulation than persons with sensory incomplete injury. Positive predictors for ambulation, including pinprick and lower-extremity motor scores greater than 20, are discussed. Meaningful recovery can occur in the upper extremities for at least 1 year. FNS options have been developed to promote functional control of the upper extremities for persons with tetraplegia, phrenic pacing, and bladder continence. A critical component of an individual’s expression of self is his/her sexuality; sexual function after SCI is described in detail, including options for treatment of erectile dysfunction and various birth control methods for women. Expectations for an appropriate rehabilitation stay for a person with metastatic SCI differ for an individual with traumatic SCI. Differences may include changing routine pathways and timelines to focus on patient-centered quality of life for transition to home.

Overall Article Objective: To identify potential outcomes in ambulation, upper-extremity function, FNS, and sexual function after SCI and after metastatic cancer.

Key Words: Gait; Gait disorders; Impotence; Paraplegia; Quadriplegia; Rehabilitation; Spinal cord injuries; Tetraplegia.

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