Setting: Inpatient rehabilitation hospital.

Case Description: A 34 year old male sustains a T4 spine injury due to an occupational related fall.

Patient: A 34 year old Caucasian male was injured in a work related fall from a 12 foot height. He was diagnosed with a T4 AIS B SCI. His BMI was 25.8kg/m. He had no significant medical history and no history of fractures. He underwent an open reduction internal fixation/decompression at T5 with a fusion at T4-T6. He was fitted for a TLSO brace which was worn for 13 weeks. By discharge from rehab he was diagnosed with a T4 AIS C and was ambulating an ambulating individual.

Case Report: The patient had a right T5, left T6 ASIA Impairment Scale (AIS) B SCI, which gradually improved to AIS C, and then AIS D, long term. He progressed to be functionally independent in ambulation with a rolling walker and left ankle foot orthosis at discharge, and then independent ambulation long term. We present the case of an asymmetric bone mineral density loss in the lower extremities of an ambulating individual.

ABSTRACT

Osteoporosis is nearly universal after SCI. The bone loss resulting from elimination of habitual mechanical loading is region specific and associated with the degree of immobilization. Over time, patients with SCI develop a specific pattern of bone abnormalities, with marked loss of bone density in the proximal tibia and femur, and relatively less bone loss in the spine [1,2]. Neuronal factors and hormonal changes may play a role [5]. There is a paucity of data on bone mineral density in ambulatory individuals with SCI. Currently there is no consensus on surveillance for osteoporosis with people with SCI.

INTRODUCTION


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National Rehabilitation Hospital, Washington DC

CASE REPORT

A 34 year old male sustains a T4 spine injury due to an occupational related fall. The patient had a right T5, left T6 ASIA Impairment Scale (AIS) B SCI, which gradually improved to AIS C, and then AIS D, long term. He progressed to be functionally independent in ambulation with a rolling walker and left ankle foot orthosis at discharge, and then independent ambulation long term. We present the case of an asymmetric bone mineral density loss in the lower extremities of an ambulating individual.

Inpatient rehabilitation hospital.

Case Description: At the time of admission to inpatient rehabilitation the patient had a right T5, left T6 ASIA Impairment Scale (AIS) B SCI, which gradually improved to AIS C, and then AIS D, long term. He progressed to be functionally independent in ambulation with a rolling walker and left ankle foot orthosis at discharge, and then independent ambulation long term. We present the case of an asymmetric bone mineral density loss in the lower extremities of an ambulating individual.

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