



The Effect of Prolonged Bed Rest in Acute Care of a Healthy 28-year-old Female With Multiple Traumas Due to a Motor Vehicle Accident

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Background & Purpose: Bed rest was once thought to be the gold standard of treatment for recovery of traumatic injuries, however recent studies suggest that prolonged bed rest is detrimental, potentially causing secondary complications. Long-term immobility may cause impairments including musculoskeletal, cardiopulmonary, integumentary and psychological. The purpose of this study is to explain and describe the barriers of prolonged bed rest and its effect on an otherwise healthy patient.

Case Description: The patient was a 28 y/o otherwise healthy female with a degloving injury to the left (L) LE s/p split thickness skin graft to the L LE, L tibial plateau fracture, and tear in the left medical meniscus. On initial admission into the hospital, she was on strict bed rest for 4 weeks. She was put exercise program including upper extremity range of motion exercises, trunk exercises, and ankle pumps. The patient was educated on the importance of pressure relief and repositioning. Following bed rest, treatment focused on functional mobility for acceptance into rehab. During her hospital stay challenges were experienced. The environment in the acute care setting poses a challenge. Providing patient with the proper equipment including bed, chair, and room set up required advanced and thorough planning to optimize quality of care and time management. The most difficult challenge when working with the patient was the psychological component. Fear, anxiety, decreased confidence, and anger were frequent roadblocks in our session as she was unable to function as she previously did. It was important to provide her with positive feedback and keep her actively involved in the plan of care. The psychology team was consulted to provide the patient with the proper care in coping with her injuries and the challenging recovery road ahead.

Outcomes: Patient outcomes were assessed through functional mobility. Initially she required assistance x3 for bed mobility and transfers. At discharge she transferred with minimal assistance of 2 people and ambulated 10 feet non- weight bearing (NWB) on L LE with min assist (A) x2 and rolling walker (RW). She was accepted to inpatient rehab where she remained for 4 weeks making significant gains in functional mobility. She was no longer NWB and at discharge from rehab she was using an axillary crutch, could negotiate 30 stairs and return home to her 5 story walk up.

Discussion: Barriers have been identified when mobilizing patients on prolonged bed rest due to trauma injuries. It is essential to provide the patient with education and an exercise program while on bed rest to limit the complications that may occur. Once stable, an early mobility program incorporating an interdisciplinary approach and constant communication is needed to reduce complications and length of stay on a patient on prolonged bed rest on the acute care setting.

References: Must include 5 current references (less than 10 years old): Cuschieri J , Freeman B , O'Keefe G , et al. Inflammation and the host response to injury a large-scale collaborative project: patient oriented research core standard operating procedure for clinical care. guidelines for venous thromboembolism prophylaxis in the trauma patient . J Trauma . 2008 ; 65 (4) : 944-950 Saunders, Cynthia Ball. "Preventing Secondary Complications in Trauma Patients With Implementation of a Multidisciplinary Mobilization Team." Journal of Trauma Nursing 22.3 (2015): 170-175.

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