

COMPLEX NEURO-MUSCULAR FAVORABLE REHABILITATION PROGRAM OF A PATIENT WITH POLITRAUMA INCLUDING SPINAL CORD INJURY AND MULTIPLE BONE FRACTURES



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Abstract

Introduction: Polytrauma which include spinal cord injuries but are associated with other traumatic events such as limb fractures, generate through their complexity the necessity of a thorough neuro-muscular rehabilitation programme with a long-term aim of reflecting the improvement of the patient's quality of life. [1-5]

Materials and Methods: This paper presents the case of a 43-year-old patient (having the The Teaching Emergency Hospital "Bagdasar-Arseni", TEHBA, Bioethics Committee approval no 9181/11.04.2018), who is hospitalized in our Neuro-muscular Clinic presenting incomplete AIS / Frankel C tetraplegia with C4 neurological level and neurogenic bladder and bowel. Also she associated multiple fractures such as: left scapular fractures, right humerus fracture (surgically stabilized), pelvic fractures, right fibular head fracture without displacement. This polytrauma was caused by a car accident (pedestrian 9.11.2017). At admission the patient had severe motor and functional impairment and was assessed functionally using the following scales: AIS / Frankel, modified Ashworth Functional Independence Measure (FIM), Life Quality Assessment (QOL), FAC International Scale, Independence Assessment Scale in Daily Activities (ADL / IADL), Walking Scale for Spinal Cord Injury (WISCI).

Results: The patient benefited from a complex neuro-muscular rehabilitation programme, having a favourable evolution, therefore the patient reaches incomplete AIS / Frankel D tetraplegia with an increase in the evaluated scales scores and thus, with a final performance of walking for short distances with a supporting frame, as well as a sphincter re-education with the neurogenic bladder remission.

Conclusions: Based on the collaboration with orthopedic and surgeon fellows the PRM physician developed a complex rehabilitation programme leading to the re-expression of locomotion function, sphincterian control recovery, selfcare ability, all of the mentioned factors improving the patient's quality of life.

Keywords: rehabilitation, traumatic brain injury, bone fractures, politrauma

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