Abstract

Introduction: Ankylosing spondylitis is a chronic inflammatory disease that affects the spinal cord. Usually the onset of the disease is between the second and third decade of life with higher prevalence in men than in women and variable evolution, patients being at risk of vertebral fractures to low or moderate trauma due to increased kyphosis and rigidity of the spine.

Materials and Methods: This paper presents a case of a 65-year-old man, chronic ethanol-consumer, hypertensive, former smoker, known with ischemic heart disease, asthma, kidney stones, and a previous C4-C5 fracture (in 2012) which also occurred on the background of ankylosing spondylitis. He was hospitalized in Neuromuscular Rehabilitation Clinic Division by transfer from the Neurosurgery II Clinic Division of TEHBA, for incomplete AIS/ Frankel D tetraplegia with C5 neurological level, neurogenic bladder, and neuromotor rehabilitation program.

Upon admission, the patient was conscious, cooperative, immobilized in Halo-West system, presenting slightly psychomotor agitation, with bilateral motor deficit, predominantly on the left side. During hospitalization, he presented wet cough along with dyspnea, decreased oxygen saturation, for which intermittent oxygen therapy was administered, with recovery of the respiratory function. The post-operative scar was daily dressed and cleaned and sutures were suppressed after 14 days. Post-operative CT scan revealed vertebral column in axis, bone fixation material well positioned and Halo-West system removal with complete subsequent mobilization was decided after 4 weeks of bed rest.

The patient has been functionally assessed using the scales: AIS/ Frankel, Ashworth modified, Functional Independence Measure (FIM), Life Quality Assessment (QQL), FAC International Scale, Independence Assessment Scale of Daily Living (ADL/IADL), Walking Index for Spinal Cord Injury (WISCI).

Results: The patient has benefited from a complex rehabilitation program with favourable evolution: sphincter re-education, regain ability of walking on short and medium distances, control of associated diseases, prevention of complications, improvement of functional status, increase of muscle strength on upper and lower limbs.

Conclusions: Associating appropriate care measures with a customized rehabilitation program in a patient with C5 AIS/ Frankel D incomplete tetraplegia and ankylosing spondylitis background, improved the quality of life.