Clinical, radiological and evolutionary aspects of higher grade of injury of subaxial spine

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Aim: The objective of this study is to evaluate the prognosis of patients with high grade of cervical spine trauma.

Material and methods: We defined the higher grade lesion of the subaxial spine as any osteodiscoligamentous lesion clinically classified ASIA A and B, very often involving the functional and vital prognosis of the patient. Over a 10-year period from 2011 to 2020, we retrospectively studied 60 records of patients followed in the neurosurgery department of the Fann University Hospital with higher grade of injury to the subaxial spine.

Results: Higher grade forms of subaxial spine injuries were frequent and represented 32% of subaxial spine injuries. The average age was 35 years with extremes of 16 to 60 years. We found predominance of males, with a sex ratio of 15, and falls were common cause. All patients presented a severe neurological, i.e. 75% classified as ASIA A. Associated injuries such as head trauma were observed in 8.3%. Surgical treatment was performed in 58.3%, by anterior approach in the majority. Mortality was high, at 80%. Only one patient had a complete recovery among the 12 survivors after 12 months of follow-up.

Discussion: The improvement of the technical platform in the pre-hospital and hospital management of higher grade of injury of the subaxial spine and the creation of secondary neurosurgical care centers can improve the functional and vital prognosis. However, prevention remains the basis and constitutes the best treatment, while at the same time raising the awareness of the population.

Conclusion: Spinal cord injury is a serious condition that can sometimes cause irreversible disability. Early and appropriate management reduces complications.

Key words: Trauma, Subaxial spine, High grade.

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