EARLY POST-ACUTE CLINICAL and EVOLUTIVE PARTICULARITIES of CERVICAL SPINAL CORD INJURY (CSCI) at ELDERLY SUBJECTS

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Summary

Study design: Retrospective analysis, focused on the early post acute evolution of 291 elderly (>65 years) patients with CSCI, first time admitted in the Rehabilitation Clinic, during 2004-2013.

Methods: analysis of the medical files.

Results: There were 205 males and 86 females (ratio 2,4). Most of the patients (215 - 74%) were from rural regions, and 57% of the CSCI happened during agricultural activity; the etiology was dominated (79 %) by accidental falls - from the same level (22%), falls from height (from chariot 48%, from trees 5,5%), but also traffic accidents (21%).

Vertebral lesions consisted in facet dislocation (bilateral in 32%, unilateral in 11% cases) or/and (associated) disk hernia (54%); about 37% patients had no radiological evidence of bone injury.

Conservative management was indicated in 106 subjects (36,4%) vs. operated (63,6%), with significant improvement of the neurological status in the surgical approached group, versus the non-operated (Fisher test, $p < 0.01$). Early admission in our department and specialized treatment favored a better neurological outcome, from totally paralysis (AIS type A+B) to incomplete lesions (AIS type C+D) ($p=0.006$).

Most of the patients 175 (60%) were discharged at home, whereas 63 (21,6%) were admitted in nursing home, aspect significantly correlated with the marital status vs. single (widow or divorced) ($p<0,01$).

A low mortality rate (2%) and miscellaneous medical complications were noticed, mainly transient postural hypotension 192 subjects (65,9%), asymptomatic urinary tract infections 259 (89%), haematuria (42 14,4%), bronchopneumonia (11,3%), depression (58,7%), central pain (44%), mild decubitus ulcer 7 patients (2,4%).

Conclusions: CSCI at elderly has etiological and physiopathological particularities. Geriatric associated pathology and poor social conditions favored the incidence of CSCI. Comprehensive inter- / multidisciplinary therapeutic approach, early admission in the rehabilitation department after surgical stabilization, favored a better outcome and a low mortality rate.

Key words: cervical spinal cord injury, elderly, early post acute evolution, medical complications, mortality rate, comprehensive inter- / multidisciplinary therapeutic approach