



## The Specificity of Spinal Trauma in Elderly Persons

Jerzy E. Kiwerski\*

Department of Rehabilitation, Warsaw Medical University, Poland

### Keywords

Spinal cord injury; Spinal injury in elderly; Treatment; Mortality

### Editorial

There are certain differences between the mechanism of injury and the course and results of treatment of post traumatic spinal cord injuries in younger and older patients. Injuries to the spinal cord in elderly patients threaten them not only with permanent function disability, but endanger the patient's life [1,2,3]. This statement holds true for all age groups, but the older are at greater risk. Particularly injuries to the cervical cord, even in young individuals, frequently yield poor results of treatment. Life threatening complications are more frequent following spinal cord injuries in the elderly patient. The dangerous situation is caused by several circumstances of which following should be mentioned: diminish inspiratory reserve volume, diseases of the circulatory system, poor tolerance of prolonged immobilization [4,5]. Hence, there is a frequently held view that elderly patients sustaining injury to the spinal cord have less chance of survival, even if the lesion is not complete. Based on a fairly large series the pathogenesis, method of treatment and clinical and functional results of these injuries are discussed.

During my 25 years of head of the Spinal Injury Department we treated 564 elderly patients (over 60 years of age) with spinal cord or cauda equina injuries. Of the patients, 43 % were aged between 60 and 65 years, but 31% were over 70 years of age. Most patients sustained injury to the cervical spinal cord (72%), particularly in its lower part. The next most frequently injured region was the thoracolumbar junction (11%), and upper thoracic cord (9%). An injury of the lumbar spine was relatively rare. Patients admitted with a complete lesion of the spinal cord were predominant (42%). The incidence of complete lesion depends on the level of spinal injury. They involved the cervical area in 35%, the thoracic spinal cord in 72% and the thoracolumbar cord in 55%. In the treatment of the patients particular attention should be paid to early reduction of traumatic deformities of the spine and spine stabilization, which allows the patient to sit upright and to have early, active rehabilitation. The creation of good condition for early mobilization is most essential in prevention of severe complications, especially respiratory ones and a fatal outcome. Both conservative and surgical methods of treatment were used depending on then level and nature of the spinal injury and the degree of spinal cord injury. Initially, conservative techniques were used more frequently, and over time surgical techniques were used. Prognosis depends mainly upon the age of the patient and the type of spinal lesion. The average results of functional treatment of the elderly are not as good as those younger patients, although unexpectedly good results have been recorded in elderly patients, particularly those in whom the lesion of the spinal cord was incomplete. The older the patient however, the smaller the chance of significant neurological and functional recovery, and the higher mortality rate.

### OPEN ACCESS

#### \*Correspondence:

Jerzy E Kiwerski, Department of Rehabilitation, Warsaw Medical University, Warsaw, Poland,  
E-mail: jerzy.kiwerski@wsm.edu.pl

Received Date: 03 Oct 2018

Accepted Date: 17 Oct 2018

Published Date: 19 Oct 2018

#### Citation:

Kiwerski JE. The Specificity of Spinal Trauma in Elderly Persons. *Ann Orthop Surg Res.* 2018; 1(1): 1004.

Copyright © 2018 Jerzy E. Kiwerski.

This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

### References

1. Gulati D, Yeo CJ, Cooney AD, Mc Lean AN, Fraser MH, Allan DB. Functional outcome and discharge dysfunction in elderly patients with spinal cord injury. *Spinal Cord.* 2011;49(2):215-8.
2. Kiwerski J. Respiratory problems in patients with high lesion quadriplegia. *Int J Rehabil Res.* 1992;15(1):49-52.
3. Kiwerski J, Weiss M, Chrostowska T. Analysis of mortality of patients after cervical spine trauma. Paraplegia. 1981;19(6):347-51.
4. Kiwerski J, Frankowska Z. Some therapeutic problems in patients with tetraplegia as a result of cervical cord damage. *Chir Narz Ruchu Ortop Pol.* 1988;53:362-7.