

## INPATIENT REHABILITATION OF TRAUMATIC BRAIN INJURY PATIENTS IN CROATIA-IS TIME RELEVANT?

**Valentina Blažinčić, Ivica Ščurić, Ivana Klepo, Marija Jeršek, Ivan Dubroja, Duško Cerovec**

Special Hospital for Medical Rehabilitation Krapinske Toplice, Croatia  
e-mail: [valentina.blazincic@sbkt.hr](mailto:valentina.blazincic@sbkt.hr)

### Background and Aims

Traumatic brain injury (TBI) is acquired brain injury caused by an external mechanical force that lead to temporary or permanent damage of neurological system. Although TBI is preventable it remains a leading cause of death and disability. Better outcome is often associated with earlier transfer to rehabilitation departments. Aim of this study was to investigate influence of admission time to rehabilitation department for TBI patients in Croatia.

### Methods

Single center, retrospective study for 5 year period. Inclusive criteria were: age over 18 years, acute inpatient TBI rehabilitation. Exclusion criteria were: other reason for inpatient acute rehabilitation, chronic TBI and patients who died during rehabilitation.

### Results

Study included 207 patients average age of 45 years. There was significantly more male patients (172). Average median initial GCS was 7 (interquartile range from 4.0 to 10.0). Average median time from TBI incident to admission was 62 days (interquartile range from 47.0 to 86.0 days). Average median admission FIM was 38.5 (interquartile range from 21.0 to 95.0) and average median dismissal FIM was 93.0 (interquartile range from 38.0 to 112.0). Improvement significantly negatively correlates with period from TBI to admission to rehabilitation ( $p < 0,001$ ).

### Conclusion

It is important to enable transfer to rehabilitation department as early as possible for severe and medium severe TBI patients because than they have possibility to achieve better functional outcome. But do we have enough rehabilitation capacity in our country? This field of healthcare needs to be considered carefully.

**Keywords:** TBI, inpatient rehabilitation, admission, outcome