

MEDICAL COMPLICATIONS DURING ACUTE INPATIENT TRAUMATIC BRAIN INJURY REHABILITATION - CROATIAN EXAMPLE

Valentina Blažinčić, Ivica Ščurić, Ivana Klepo, Ivan Dubroja, Duško Cerovec

Special Hospital for Medical Rehabilitation Krapinske Toplice, Croatia

e-mail: valentina.blazincic@sbkt.hr

Background and Aims

Traumatic Brain Injury (TBI) is a chronic disease according to WHO. It has complex consequences on every level of society and impact that is not yet sufficiently quantified. This disease has a high incidence of medical complication (MC). They affect the course of acute treatment, the course of acute rehabilitation, the outcome of rehabilitation and some of complication lead to an increase risk of mortality. Aim of the study is to demonstrate the type and frequency of MC in patients with TBI during acute inpatient rehabilitation (IR).

Methods

On a randomly selected day we analyzed all patients with TBI admitted to the acute IR. Inclusion criteria were age over 18 years, TBI (with possibility of included spinal cord injury and bone fractures). Exclusion criteria were other reason for inpatient acute rehabilitation and chronic TBI. The investigated complications were: posttraumatic epilepsy paroxysmal sympathetic hyperactivity, hydrocephalus, venous thromboembolism, hyponatremia, spasm, contractures, dysphagia, malnutrition, urinary retention, tracheal cannula, infections, colonization with multidrug-resistant bacteria (MDRB) and presence of pressure ulcers.

Results

We analyzed data for 22 patients, average age of 45 year (85% were men). Average initial GCS 9, average admission FIM 44, average time of data collection 99 days. The following complications were recorded: contractures (68%), spasm (59%), dysphagia (59%), colonization with MDRB (55%), malnutrition (50%), presence of tracheal canula (50%), posttraumatic epilepsy (50%), infections (18%), hyponatremia(14%), pressure ulcers (9%) patients. On the day of screening we did not register hydrocephalus, paroxysmal sympathetic hyperactivity and venous thromboembolism. Patient with disorders of consciousness had higher incidence of the recorded MC.

Conclusion

Patients with TBI have high frequency of MC. Some of MC that occur during acute IR can be prevented by appropriate treatment during the acute care of patients with TBI. Timely diagnosis and treatment MC during IR can reduce mortality and improve outcome of patients.

Keywords: TBI, inpatient rehabilitation, medical complications