

Background

In the acute phase, patient with severe head injury has a decreased level of arousal. After this phase, patients themselves and their relatives could get surprised by symptoms including seizures, contractures, spasticity, cranial nerve injuries, altered vision and sense of smell, symptoms of dysautonomia, altered sphincter control, altered coordination, speech and language impairments and a lot of different physical symptoms that may vary according to the severity and the topographic distribution of the injury. Nevertheless, the most invalidating impairments after a severe TBI are those related to cognitive and behavioural functioning. In the awakening phase from coma, is usual to see behavioural symptoms like agitation, post-traumatic amnesia or lack of orientation. Common late symptoms may include memory deficits, attentional problems, executive dysfunction, labile mood, social desinhibition, impulsivity, verbal or physical aggression, apathy, altered emotional control, anxiety and depression.

The rehabilitation of patients with brain injury begins during the acute stage and it would be focused on the remaining physical and cognitive deficits: arousal, attention, agitation, memory, seizures, spasticity, pain, sphincters, swallow, speech, mobility. In all cases the improvement will depend on the appropriate use of the temporal window in the rehabilitation process opened by the optimal clinical and pharmacological approach.