Rehabilitation, vocational and medico-social care after a severe traumatic brain injury (TBI), and their predictors: Results from the PariS-TBI study

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Objectives.— To describe physical, cognitive and behavioral disorders and study quality of life 4 years after a severe traumatic brain injury. Study the prognostic factors of outcome and quality of life’s determinants.

Methods.— Prospective four-year follow-up of adults with a severe TBI in the Parisian area, through the PariS-TBI study. Out of 504 patients recruited from 2005 to 2007, 245 survived at four years, 147 were evaluated. Total disability was assessed via the GOS-Extended. Cognitive sequelae were assessed with the questionnaire DEX and the Neurobehavioral rating scale-revised (NRS-R). Quality of life was assessed with the EuroQol scale and the Qolibri questionnaire.

Results.— Patients (mean age 33 years, 80% men) were severely disabled for 31%, moderately disabled for 39%, and had a good recovery for 27%. They had received the following cares: physiotherapy (78% of patients), speech therapy (68%), psychotherapy (50%) and occupational therapy (42%). Follow-up by a PMR physician or neurologist concerned 63% of patients, and vocational follow-up 23%. Social compensation files had been completed for 59%. In univariate and multivariate analyses, injury severity and outcome on the GOSE scale were the main predictors of care utilization. Physiotherapy, speech therapy and psychotherapy were more frequent for patients with specific disabilities (respectively motor, speech/swallowing impairments and depression). Care utilization was not significantly associated with cognitive impairments. Patients who had a vocational follow-up were younger, less disabled in daily living activities, and with predominantly intermediate GOSE scores. Social compensation files were strongly related to all kind of deficiencies, and to a lower educational level. Geographical access to care variables did not seem to influence care utilization.

Discussion.— Factors influencing outcome and quality of life are complex. It is important to study.

Further reading