

Brain injured patients who have suffered a coma, and patients with tetraplegia, require important medical supervision with a dedicated program of rehabilitation and are the most likely to benefit from this type of environment. As opposed to critical care, patients should not be in a life-threatening condition. They may have a tracheotomy and/or a gastrostomy but fractures should have been treated before admission.

A specific organisational structure is necessary in regard to the number of caregivers and rehabilitation professionals in order to manage medical events still frequent at this stage (e.g., agitation, neurovegetative crisis, complications of immobility), technical cares (e.g., tracheotomy, gastrostomy, intermittent bladder irrigation) and high dependency.

Besides minimising the consequences of immobility, especially respiratory complications, the functional assessment and rehabilitation of impairments are central at this point as these are often not investigated sufficiently in intensive care units. Evaluation of awareness may be a specific goal for patients with chronic conscious disorders before the orientation toward units dedicated for vegetative and minimally conscious states.

An increased number of post-acute rehabilitation units have been created in recent years but the status and the funding of this type of organisation is still not clear within the French care system.

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Evaluation of the activity in the rehabilitation and post-intensive care departments in the Toulouse university hospital

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Keywords: Rehabilitation and post-intensive care department; Epidemiology
Introduction and objectives.— In the Service of Physical Medicine and Rehabilitation Toulouse University Hospital, 6-bed rehabilitation post-reanimation (RPR) were opened in August 2008. After more than three years, we review this new activity.

Method.— We analyzed the epidemiological data (age, sex), the original service, the primary pathology, duration of stay and mode of exit.

Results.— Hundred and eight patients (73 men 68% and 35 women 32%) aged 49.6 ± 16.4 years stayed in our unit RPR, for an average of 64.5 ± 66 days. The reason for these hospitalizations was the consequences of a “reanimation” in 37 patients (34%), 22 (20%) were tracheostomized and four (4%) under controlled ventilation, nine were in the process of awakening (8%) and nine (8%) with behavioral disorders that require monitoring. The original service was neurology for 25 patients (23%), neurosurgery in 24 patients (22%), the unit of organ transplantation in 10 patients (9%) and the intensive care unit for nine patients (8%).

The main pathology was stroke in 28 patients (26%), spinal cord injury in 19 patients (18%), multiple sclerosis in nine patients (8%) and transplantation in eight patients (7%). Forty-three patients (40%) went in our area of traditional hospitalization, 15 (14%) went to another department follow-up care and 26 (24%) returned home, including four hospitalization at home. One died in the service

Conclusion.— This activity rehabilitation post-reanimation corresponds to a real need for public health, and patients may benefit from specific rehabilitation associated with appropriate and specialized medical care. The duration of stay is long and we must improve our collaboration with other post-acute unit, in particular the early learning centers.

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Outcome of 18 patients with a severe traumatic brain injury and prognostic factors

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Keywords: Neuroradiologic evaluations; Evoked potentials; Neuropsychological tests; Neurobehavioral Rating Scale; Quality of life

Introduction.— Severe traumatic brain injury is a serious public health issue. In the long run, cognitive and behavioural deficiencies remain the most frequent and the most disabling. This prospective, descriptive and monocentric study aims to investigate the medical and psychosocial outcome of 18 patients, 2 to 4 years after their trauma, and tries to highlight, in the initial data collected, which were the most prognostic factors.

Methodology.— Initial data includes: usual clinical data, lesional neuroradiologic evaluations, analyses of early and late auditory evoked potentials, assessments of coma duration and post-traumatic amnesia. Long-term clinical evaluations include neuropsychological tests assessing attention, memory and executive functions and the Neurobehavioral Rating Scale-Revised. Depression and anxiety were evaluated, and data from the Glasgow Outcome Scale, the Measure of Functional Independence and a quality of life scale were used as a functional evaluation.

Results.— Six patients present a good recovery; seven present a severe handicap with a loss of autonomy, four have a moderate handicap preventing them from returning to work and one patient died. The most frequent neuropsychological impairment is memory loss; the most disabling one is the dysexecutive syndrome. Duration of coma and post-traumatic amnesia are strongly correlated to the evolutionary profile, in the contrary of the intensity of diffuse axonal injury and brainstem lesions in MRI. The absence of the N100 component is correlated with a pejorative evolution in all cases.

Discussion.— The heterogeneity of the population and their clinical background participates to the low correlations between the initial data collected and the patient's evolutions and justifies an individualized, prolonged and multi-sectorial care for each patient.

Further readings

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The effect of age at injury and socio-economic status on recovery after childhood severe traumatic brain injury: Results of a prospective study

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