CO27-002-e
Lost-to-follow-up in a longitudinal traumatic brain injury (TBI) cohort study and social background. Results from the PariS-TBI study
C. Jourdan b,∗, E. Bayen a, S. Barhami b, I. Ghout a, E. Darnoux c, S. Azerad c, P. Pradat-Diehl b, A. Ruet a, C. Vallat-Azouvi a, J.J. Weiss a, P. Aegerter a, P. Azouvi e
a Assistance publique–Hôpitaux de Paris, Hôpital Raymond-Poincaré, Garches, France
b Assistance publique–Hôpitaux de Paris, Hôpital Pitié-Salpêtrière, Paris, France
c Assistance publique–Hôpitaux de Paris, Unité de Recherche Clinique, Hôpital Ambroise-Paré, Paris, France
d Centre Ressources Francilien du Traumatisme Crânien (CRFTC), France
e Université de Versailles, Saint-Quentin-en-Yvelines, France
*Corresponding author.

Objectives. – To assess patient’s and informal caregiver’s 4-year outcomes in case of a TBI litigation procedure. Methods. – Multicentre prospective cohort including 504 initially patients with severe TBI (Glasgow Coma score ≤ 8).

Results. – Among the 147 patients followed 4 years after the TBI, 50 declared being involved in a litigation procedure (LP). Mechanisms of TBI-LP were road traffic accident (n = 46), physical attack (n = 2), fall during professional activity (n = 2). Mean financial compensation (capital) amounted 203,761 euros (min = 0, max = 500,000) for 29 patients; 15 other victims received monthly indemnities from the French social security (work accident).

Discussion. – Patients in the TBI-LP group were more severe initially (length of post-traumatic amnesia score∗) and (not surprisingly) more severe 4 years after the accident (GOS-E−∗∗, DEX−∗∗∗, NRS-r−∗∗∗, HAD−∗∗∗) than patients in the TBI-with-no-LP group (no other difference found between both groups for age, sociocultural level, Glasgow coma score, length of coma). In multivariate analyses, sub-HAD-depression and ZBI were significantly and positively associated with more cognitive disorders (NRS-r−∗∗*) and with LP involvement∗ after adjusting for the GOS-E level and length of post-traumatic amnesia variables.

Conclusion. – Our results might suggest that LP might increase reported depression symptoms in patients with severe TBI and perceived burden in caregivers.

CO27-004-e
Goal management training for rehabilitation of executive functions: A systematic review of effectiveness in patients with acquired brain injury
A. Krasny-Pacini a, J. Evans b, M. Chevignard c
a Institut Universitaire de Réadaptation Clemenceau, Strasbourg, France
b University of Glasgow; Gartnavel Royal Hospital, Glasgow, Scotland, UK
c Hôpital Saint-Maurice, Saint-Maurice, France

Introduction. – Executive dysfunction is a major sequelae after brain injury. Goal management training (GMT) is a metacognitive rehabilitation approach that is increasingly used throughout the world.

Purpose. – To determine if GMT is effective for the rehabilitation of executive functions following brain injury when administered alone or in combination with other interventions.

Method. – Systematic review, with quality appraisal specific to executive function research and calculation of effect sizes.

Results. – Twelve studies were included. Four studies were “proof-of-principle” studies, testing the potential effectiveness of GMT and eight were rehabilitation studies. Effectiveness was greater when GMT was combined with other interventions. The most effective interventions appeared to be those combining GMT with: personal goal setting; external cueing or prompting to apply GMT to the current task; personal homework to increase patients’ commitment and training intensity; ecological and daily life training activities rather than paper-and-pencil, office-type tasks.

Discussion. – Outcome measures in GMT research need to be more ecological, novel and assess participation.

Conclusion. – Comprehensive rehabilitation programs incorporating GMT, but integrating other approaches, are effective in executive function rehabilitation following brain injury in adults. There is insufficient evidence to support use of GMT as a stand-alone intervention.

Further reading
Disabil Rehabil 2013.
http://dx.doi.org/10.1016/j.rehab.2014.03.242

CO27-005-e
Executive dysfunctions and outcome 4 years after a severe TBI. Results from the PariS-TBI study
P. Azouvi a,∗, C. Jourdan b, C. Vallat-Azouvi a, E. Bayen a, P. Pradat-Diehl b, P. Aegerter a, I. Ghout b, J.J. Weiss a, E. Darnoux c
a AP–HP, Garches, France
b URC Paris-Ouest, Paris, France
c Centre Ressources Francilien du Traumatisme Crânien (CRFTC), France
*Corresponding author.
Objective.— To assess the impact of executive dysfunctions, as assessed with the DEX, on quality of life and social adaptation in patients with severe TBI at a chronic stage.

Methods.— The DEX (self-rated version), is a reliable and sensitive questionnaire to assess executive dysfunctions in patients with severe TBI at a chronic stage. The DEX showed a good internal consistency in this sample. A factorial analysis showed only one single underlying factor. The total DEX score was significantly and inversely correlated with years of education. No injury severity variable was significantly related with the DEX total score. The DEX was however significantly and positively related with cognitive deficits as assessed with the NRS-R, with mood disorders, with dependency in elementary and extended activities of daily living, and with non-return to work. In multivariate analyses, only cognitive and mood impairments were significantly and independently related with the total DEX score.

Conclusions.— The DEX (self-rated version), is a reliable and sensitive questionnaire to assess executive dysfunctions in patients with severe TBI at a chronic stage. The DEX showed a good internal consistency in this sample. A factorial analysis showed only one single underlying factor. The total DEX score was significantly and inversely correlated with years of education. No injury severity variable was significantly related with the DEX total score. The DEX was however significantly and positively related with cognitive deficits as assessed with the NRS-R, with mood disorders, with dependency in elementary and extended activities of daily living, and with non-return to work. In multivariate analyses, only cognitive and mood impairments were significantly and independently related with the total DEX score.

Reference
http://dx.doi.org/10.1016/j.rehab.2014.03.243

CO27-006-e

Social skills and quality of life post-mild or moderate traumatic brain injury: Influence of cognitive and communication disorders
O. Kozlowski-Moreau<sup>a</sup>, E. Allart<sup>a</sup>, M. Le Gall<sup>b</sup>, L. Stephans<sup>b</sup>, P. Deicas<sup>b</sup>, M. Rousseaux<sup>b</sup>
<sup>a</sup>Hôpital Swynghedau, CHRU de Lille, Lille, France
<sup>b</sup>Institut d’orthophonie, Lille, France
*Corresponding author.

Keywords: Mild and moderate traumatic brain injury; Communication; Social and occupational adaptation; Quality of life; Evaluation

Objectives.— To examine cognitive and communicative abilities after mild or moderate traumatic brain injury (MTBI) and their consequences on quality of life (QoL) and social adaptation.

Methods.— We included 28 adults with mild (22) and moderate (6) TBI (mean age 41, time since TBI 7.3 years). Social and occupational adaptations were apprehended with the EBIS document and QoL with the QOLIBRI questionnaire. We used tests for subtle language (TLE), daily life problem solving (TRP-VQ), communication (TLC) and participation to communication (QLP).

Results.— Pathological scores were found in 14.3% of cases in the TLE, 14.3% for verbal and 25% for non-verbal communication in the TLC, 28.6% in the QLPC and 3.6% the TRP-VQ. Leisure activities were modified in 64%, work in 43% and conjugal relationships in 32% of cases. The QOLIBRI score and leisure and work activities showed significant relationships with the TLE and TLC and with satisfaction with communication (QLP).

Conclusions.— In these patients, subtle language (SLT) and communication (TLC) difficulties participate in the reduction of QoL and work and leisure activities.

http://dx.doi.org/10.1016/j.rehab.2014.03.244

CO27-007-e

Neuropsychological and psychological assessment more than 1 year after a mild traumatic brain injury
P. Bruguier<sup>a</sup>, C. Picq, P. Pradat-Diehl
Service MPR, Groupe Hospitalier Pitié-Salpêtrière, Paris, France
*Corresponding author.

Keywords: Mild traumatic brain injury; Cognitive disorders; Psychiatric disorders

Objectives.— To analyze the cognitive, psychological and psychiatric disorders more than 1 year after a mild traumatic brain injury (MTBI).

Patients.— Retrospective study including 14 adults (3 men, 11 women), mean age 47 years (SD: 10), who spontaneously came in MPR department for incapacitating sequelae about 47 months after a MTBI.

Methods.— Comprehensive medical, neuropsychological, psychological (projective tests) and psychiatric (clinical assessment and MMPI) assessment.

Results.— All patients were socially integrated and did not present any neurological or psychiatric previous history. Only 2 patients were back to their previous activity at the time of the consultations. The clinical assessments showed the extent, diversity and atypical aspects of complaints in cognitive, physical and emotional domains. The neuropsychological assessments highlighted various pictures: from an isolated cognitive disorder to severe attentional and dysexecutive disorders. The psychiatric assessments also showed various pictures: from some single symptoms to established syndromes. All patients’ psychic functioning brought to light points of fragility.

Discussion.— The assessments allowed pointing out persistent cognitive impairments for all patients who also present psychic fragility, in terms of Oedipus structuration and elaboration of depressive position: cause or consequence of the persistence complaints, the question remains open.

http://dx.doi.org/10.1016/j.rehab.2014.03.245

CO27-008-e

Perceptions among brain-damaged patients and their families of links between family history and the experience of the illness
H. Oppenheim-Glueck<sup>a</sup>, P. De Collasson<sup>b</sup>
<sup>a</sup>INSERM U 669, Institut Marcel-Rivière, La Verrière, France
<sup>b</sup>CRFTC, 96, rue Didot, 75014 Paris, France
*Corresponding author.

Keywords: Brain injury; Family history; Life events; Patient; Family

Aims.— To study perceptions among brain-damaged patients and their families of their family history, relevant events, and their experiences of the brain damage.

Materials and methods.— Semi-guided interviews. Nineteen patients and 19 paired family members.

Results.— The brain damage was not the first difficult life event (for 89% of patients and 100% of family members). Earlier events were still causing painful affects at the time of the brain damage (patients 37% and family 74%) and made it more difficult (patients 32%, family 63%). The present illness revived earlier painful experiences (patients 53%, family 58%). Disintegration, breakdown or distancing of family relationships were frequently reported (patients 58%, family 68%). Forty-seven percent of the family members and 53% of the patients reported calling on resources mobilised to cope with earlier difficult events, and on earlier happy events, in order to face up to the present situation.

Discussion/conclusion.— Attention to personal and family history provides insight into the modes of functioning of brain-damaged patients and their families, could guide interventions by healthcare teams, enable more suitable assistance to be provided and foster resilience. This research had the benefit of a grant from FTC-SOFMER in 2010.

http://dx.doi.org/10.1016/j.rehab.2014.03.246