

Wisconsin Card Sorting Test, Six Part Test), and parent-based questionnaires assessing executive functions in everyday life (BRIEF and DEX-C). The ecological task consisted of a cooking task, in which the child was asked to prepare two distinct recipes, in autonomy, while respecting instructions and rules. Analyses were performed with the non-parametric tests.

**Results.** Neuropsychological assessment indicated mild to moderate executive deficits. The parent-rated questionnaires indicated that over 50% of patients suffered dysexecutive deficits in everyday life. In the cooking task, all the quantitative and qualitative variables were significantly impaired in the patient group ( $p < 0.001$ ). Patients were slow and exhibited difficulties in on-line monitoring of the task. They displayed more purposeless actions and a dependency towards the examiner. Correlations of the number of errors with the neuropsychological tests and the dysexecutive questionnaires were low.

**Conclusion.**— This study confirms the important sensibility of this cooking task to better approach dysexecutive impairments in children with acquired brain injury, and suggests it is important to use dynamic naturalistic assessments along with neuropsychological tests and questionnaires.

#### References

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### Incidence and risk factors of post-traumatic epilepsy in children: A French prospective cohort (TGE cohort)

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Acquired brain injury in children often result in severe cognitive and behavioral impairments. They are significantly worsened by associated epilepsy. In the literature, the incidence rates of post-traumatic epilepsy in children and adults with traumatic brain injury (TBI) vary between 8 and 30% [1].

**Objective.**— To explore incidence and risk factors of post traumatic epilepsy in a prospective cohort of children with severe accidental TBI.

**Methods.**— Mono-centric prospective cohort study. Children, aged 0 to 15 years, consecutively admitted in the intensive care unit of the paediatric neurosurgery department—Necker Hospital for severe accidental TBI were included. Data on TBI severity, initial intensive care monitoring, and the onset of post-traumatic epilepsy were prospectively collected over two years. The following risk factors were taken into account in the analysis: Glasgow coma scale, length of coma, presence of a penetrating skull fracture, hypo-perfusion brain, early seizures.

**Results.**— Eighty-one children were included. There were 65 survivors [66% males; mean age 8.12 years (DS = 4.6)]. Five children developed a post-traumatic epilepsy, the incidence was 7.7% [95% CI 0.9%–14.4%]. They developed epilepsy within the first 12 months post-injury. Only one of those five children had presented early seizures. Among the risk factors studied only the duration of coma was significantly associated with the onset of post-traumatic epilepsy ( $p = 0.02$ ). Mean coma duration was 11 days (range: 5–16) in the subgroup with post-traumatic epilepsy versus 5 days (range: 1–23) in children without epilepsy.

**Discussion.**— Post-traumatic epilepsy occurred after severe pediatric TBI, but the incidence is low. To our knowledge, this is the first study reporting data from

a prospective cohort of children with severe accidental TBI. Our findings about the risk factors of post-traumatic epilepsy onset are consistent with data from the literature, as TBI severity is the most frequently reported factor.

#### Reference

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### Presentation of the French National Reference Centre for Pediatric Stroke

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Each year, 500 to 1000 pediatric strokes occur in France. As the lesion occurs during the brain maturation process, consequences may only become apparent several years after the stroke when brain functions have reached complete maturation and environmental demands (including school) increase. An individual care plan focused on the child, adequate referral to multidisciplinary rehabilitation teams, extensive information and discussion between family, education and care teams are essential during the entire follow-up, taking into account the child's and family's opinion.

Under the 5-year stroke plan (stroke 2010-14), the Ministry of Health has approved a five-year National Reference Centre for Pediatric Stroke, multi-site, coordinated by the University Hospital of Saint-Etienne. The center involves the imaging department at Bicêtre Hospital (Assistance-Hospitals of Paris [AP-HP]), the pediatric neurosurgery and pediatric neurology departments at Necker-Enfants Malades Hospital (AP-HP), the pediatric and neonatal intensive care unit of the University Hospital of Grenoble, the Physical Medicine and Rehabilitation Pediatric departments at Hospices Civils de Lyon and Saint-Maurice Hospitals.

The center's missions are: to develop collaborative activities to bring together, coordinate and manage care pathways locally and nationally, in order to provide expertise for complex cases; to educate and inform all professionals involved in pediatric stroke to further shorten the diagnostic delay; to train and inform professionals, families and the general public about the consequences of pediatric stroke; to collect epidemiological data and to coordinate research in this field.

The center is now the first interlocutor of the ministry, the regional health agencies, the healthcare professionals involved pediatric stroke care, as well as patients' representatives. Bi-monthly multidisciplinary video-conference meetings started early 2013 to discuss issues requiring expertise. A website is under construction.

For Physical Medicine and Rehabilitation, the center will be connected to the regions to discuss the organization of the optimal management of children who had a stroke, until adulthood. Working groups may be established to make a survey of what is done in each region and to formalize the care pathways of patients with pediatric stroke.

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