Early weight gain after childhood traumatic brain injury


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Keywords: Traumatic brain injury; Outcome; Weight; Children; Pituitary function

Objectives.—To assess weight changes after traumatic brain injury (TBI) in children and the factors influencing them.

Methods.—Longitudinal observational study of 39 children (59% boys, mean age 8.0 ± 4.4) with TBI of mixed severity. Weight and height before TBI were obtained from the children’s records and were then measured monthly for one-year post-TBI. Body mass index (BMI) and BMI z-scores were calculated, and pre-TBI values were compared with functional values using paired tests. Linear mixed-effect interaction models evaluated the effect of children’s characteristics on BMI z-score evolution.

Results.—Z-score curves revealed early weight loss followed by a rapid increase. Mean BMI gain over the study period was 0.9 kg/m² (P < 0.001) and mean z-score gain was 0.4 (P = 0.006). Six children had become overweight. Factors associated with a greater increase rate in z-score were mobility restriction, male sex and older age. Global pre- to post-TBI weight gain was significantly higher in males. Pituitary hormonal testing was available for 17 children at 3 months and for 27 at one year. Growth hormone deficiency was identified in one child.

Discussion.—Early post-TBI weight gain of children was rapid and excessive. Male sex was a risk factor for excessive weight gain.

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Discussion. – This study confirms the cross-cultural psychometric properties of the French translation of the CASP and emphasizes the utility of this scale for use in French speaking children.

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Etiological study of sensorineural hearing loss in children and adults in Béni-Mellal, Morocco

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Keywords: Deafness; Etiology; Bilateral sensorineural; Presbycusis

Objective. – We conducted a study of 210 patients with hearing impairments of perception whose objective was to determine the probable causes of occurrences of these hearing loss in children and adults.

Methods. – The etiological diagnosis of patients sensorineural deafness was based on clinical, radiological and audiometric data confrontation. Possibly supplemented by a family survey that included questions on the State of the mother’s health before and during pregnancy and during childbirth, any information on the person with a disability. The development of the questionnaire, analysis and processing of the results were made by a statistical software sphenix 2.

Results. – The results show that: about 55.7% of deafness are acquired original, 31.4% of deafness are of unknown origin, and 12.9% of deafness are genetic in origin; 11.9% of postnatal acquired deafness are due to typhoid fever, bacterial meningitis and the day causes major acquired deafness in children under the age of 10 years with respectively 3.8% and 8.1%. The presbycusis and chronic ear infections are the major causes of deafness in the elderly of 60 years.

Conclusion. – Half of all cases of hearing loss could be avoided through primary prevention.

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Epidemiology of spinal cord diseases in children: A review of 584 patients

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Keywords: Spinal cord disease; Dysraphism; Children; Epidemiology

Objective. – Epidemiology of spinal cord diseases in children is poorly known. We attempted to describe it in our population.

Material and method. – We reviewed consultations codings of children seen for spinal cord disease in the pediatric rehabilitation department of Trousseau Hospital from January 2000 to August 2013. We analysed data based on patient and spinal cord disease.

Results. – Overall, 584 patients were reviewed; 54.6% were females. The diagnosis was antenatal (4.5%), neonatal (25.9%), or made at 7 years old (±5). First consultation occurred at the age of 6.1 years old (±5.2). Mean follow-up was 3.7 years. Seventy-two percent were congenital diseases. Open dysraphisms represented 15% of overall dysraphisms. Occult dysraphisms consisted mostly of lumbosacral lipomas (39.2%). Tumors were the most common form of acquired diseases of spinal cord (n = 62). Thirty-one percent of them were astrocytomas. A cutaneous anomaly made the diagnosis in 26% of occult dysraphisms. At the last review, 12% of children could not walk; 58% presented urinary incontinence and 14% were painful.

Discussion. – Our study was the first to describe epidemiology and distribution of spinal cord lesions in children, and our population was the largest we could find.

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Low impact of congenital hand differences on health-related quality of life

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Keywords: Congenital hand difference; Health-related quality of life; Determinants

Introduction. – In a cross-sectional study, HRQoL of 116 children with CHD aged 10–15 years was assessed using the child self-report of The Pediatric Quality of Life Inventory (PedsQL).

Methods. – The determinants of HRQoL were analysed using regression analyses controlling for age, gender, ethnicity, cosmesis, activity level, comorbidity, surgery, unilateral or bilateral involvement, and number of affected digits per hand.

Results. – On almost all domains the CHD children scored as good as healthy subjects. The 39 children in the older age group (13–15 years) scored higher on the physical health domain, but lower on the social domain. More ease of activity performance enlarged the scores on all sub domains and the presence of comorbidity reduced the scores on all sub domains except for school functioning. Besides those 2 determinants the level of the physical health was determined by ethnicity, unilateral or bilateral involvement and surgical intervention. Emotional functioning was determined by the number of affected fingers and the total score by bilateral involvement. Age determined the level of school functioning.

Discussion. – Children with CHD report their health-related quality of life (HRQoL) as good as their healthy peers, and relevant determinants could be recognized.

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Impact of age and especially the transition on the rehabilitative and medical care in individuals with cerebral palsy in Brittany

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Keywords: Cerebral palsy; Transition to adult care; Patient care management; Equipment; Drugs; Rehabilitation; Adult; Children

Objectives. – To determine the effect of age, and especially the child-adult transition, on medical and rehabilitative care in individuals with cerebral palsy.

Method. – A questionnaire about the entire medical and rehabilitation care at the moment the participants filled the questionnaire, was sent through a network of pediatric professionals and a network involving adult with PC (Breizh PC). The frequencies of the different treatments were analysed by age groups and functional levels (walking vs non-walking patients).

Results. – Four hundred and ninety-eight questionnaires from 2–82 years patients were analysed. Regardless of functional level, analgesics (5 to 30%) and psychotropic (3 to 30%) increase significantly with age, while the orthotic devices and rehabilitation intensity decreased significantly. A “break” occurred around the age ground 18–25 years including an increase in psychotropic, a decrease of the number of orthotics and frequency of the rehabilitation care except for physiotherapy.

Discussion. – The evolution of the consequences of the cerebral palsy and differences in children/adults treatment strategies induce significant changes in the...