

[73.2 (± 15.4)] and did not improve over time. 76% had behavioural disorders already evident during hospitalization. Upon discharge, 62% required adapted and/or specialized schooling. After an average follow-up of 8 and a half years, only 6 patients still followed an ordinary curriculum and 8 were not attending school anymore. Four girls were victims, and among 36 boys, all were perpetrators, but 3 had been victims previously. The offenses were mainly cases of violence (56%), but also entailed thefts, traffic offences, sexual assaults, drug use and vandalism.

Discussion Children with ABI who suffer or commit offenses are mainly boys, from very low socioeconomic background, with pre-injury academic and social difficulties, who sustained severe TBI. They suffer very severe and disabling cognitive deficits and behavioral disorders. Multidisciplinary care and follow-up of those children more at risk is essential in the long-term.

Keywords Acquired brain injury; Child; Cognitive disorders; Behavioral disorders; Youth offenders; Violence; Educational outcome

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Childhood craniopharyngioma: What about participation?



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Introduction Craniopharyngioma is a rare, benign central nervous system tumor, which may be source of multiple complications, from endocrinology to vision, neurology and neurocognitive functions. This morbidity can lead to participation restrictions, as described in the International Classification of Functioning. Primary objective of this study was to measure participation in a population of children and young adults having been affected by a childhood craniopharyngioma, using the LIFE-H questionnaire (Assessment of Life Habits), valid as a participation measure in various pediatric disabilities. We also examined potential links between the tumor characteristics, the complications and the participation.

Patients and methods Descriptive, multicenter study, including all patients having presented a childhood craniopharyngioma (before 18), followed in Lyon region between 2007 and 2013. Main criteria was the LIFE-H results, completed by the patient or the carer.

Results On 21 patients included in the study, 14 have completed the questionnaire, with a mean answer delay of 6.7 years after the diagnosis (SD: 3.9 years). Mean total LIFE-H score was 8.4 (SD: 1.03) for a normal score estimated at 10 in general population. The lowest scores affected nutrition, community life and recreation dimensions. All patients had an endocrinological deficit, 19% an hypothalamic syndrome, 52% an impaired fullness feeling, 76% visual impairment, 14% a neurologic impairment, 91% a neurocognitive impairment. 57% of all patients could keep on attending a normal school, 43% had to enter a specific school. In patients in specific school, LIFE-H results were significantly lower in nutrition, communication, housing and recreation dimensions.

Conclusion Patients with childhood craniopharyngioma have their participation affected, mainly in the social dimensions. We could enhance it with systematic diagnosis of those participation

impairments, with the goal of a suitable multidisciplinary management.

Keywords Childhood craniopharyngioma; Morbidity; Participation; LIFE-H

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Promoting the use of Motor Function Measure (MFM) as outcome measure in patients with Duchenne Muscular Dystrophy (DMD) treated by corticosteroids



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Objectives Assessing muscle function is a key step in measuring changes and evaluating the outcomes of therapeutic interventions in Duchenne Muscular Dystrophy (DMD). Regarding the large use of corticosteroids (CS) in this population to delay the loss of function, our goal was to monitor the evolution of motor function in patients with DMD treated by corticosteroids (CS) and to study the responsiveness of Motor Function Measure (MFM) in this population in order to provide an estimation of the number of subject needed for a clinical trial.

Method A total of 76 patients with DMD, aged 5.9 to 11.8 years, with at least 6 months of follow-up and 2 MFM were enrolled, 30 in the CS treated group (8 ± 1.62 y) and 46 in the untreated group (7.91 ± 1.50 y).

Results The relationship between MFM scores and age was studied in CS treated patients and untreated patients. The evolution of these scores was compared between groups, on a 6-, 12- and 24-month period by calculating slopes of change and standardized response mean. At 6, 12 and 24 months, significant differences in the mean score change were found, for all MFM scores, between CS treated patients and untreated patients. For D1 subscore specifically, at 6 months, the increase is significant in the treated group ($11.3 \pm 14\%/y$; SRM 0.8) while a decrease is observed in the untreated group ($-17.8 \pm 17.7\%/y$; SRM 1). At 12 and 24 months, D1 subscore stabilized for treated patients but declined significantly for untreated boys ($-15.5 \pm 15.1\%/y$; SRM 1 at 12 mo and $-18.8 \pm 7.1\%/y$; SRM 2.6 at 24 mo). 21 patients lost the ability to walk during the study: 6 in the CS treated group (25% at 24 months, mean age: 10.74 ± 1.28 y) and 15 in the untreated group (64.71% at 24 months, mean age: 9.20 ± 1.78 y).

Discussion and conclusion Patients with DMD treated by CS present a different course of the disease described in this paper using the MFM. Based on these results, an estimation of the number of patients needed for clinical trial could be done.

Keywords Duchenne Muscular Dystrophy; Motor Function Measure; Corticotherapy; Clinical trials

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Posters

P068-e

Linear morphea of children: Rehabilitation treatment and equipment taken through a case report and review of literature

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Introduction Linear scleroderma morphea is a subtype of localized scleroderma which mainly affects children and is sometimes complicated by bone and joint deformities. Its location at the foot is rarely reported.

Aim of study Describe the clinical and anatomical deformity of the foot and ankle in children with linear scleroderma and chat support, from a clinical case and a review of the literature.

Observation An 8-year-old boy followed for Linear morphea was addressed to the consultation of physical medicine and rehabilitation for rehabilitation care and casting of a deformation of the right foot. Physical examination found skin lesions in the thigh and right ankle, a paretic right lower limb, an inequality of length of 3 cm lower right limb, with stiffness in his right ankle. Walking is done with lameness and attack the forefoot, the review found podoscopic grade hollow legs [1] with calcaneal valgus more pronounced on the right. The management consisted of a background treatment with corticosteroids, a functional rehabilitation and suitable equipment.

Discussion/conclusion Scleroderma focal length of the child's foot is a rare and can be associated with irreducible and scalable orthopedic deformities. Early diagnosis, extensive surgical release in the event of severe and progressive orthopedic deformation, followed by physiotherapy and extended equipment, represent the main elements of the management.

Keywords Linear morphea; Strain; Rehabilitation; Equipment

Disclosure of interest The authors have not supplied their declaration of conflict of interest.

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Further reading

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P069-e

Severe complex regional pain syndrome (CRPS) type I: A multidisciplinary treatment plan and intensive physiotherapy in pediatrics

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Background Nowadays, paediatric CRPS is a recognized disease with its own specificities compared to the adult CRPS. However, its treatment is difficult and there is sparse consensus among the management of those patients, partly due to a usually delayed diagnosis and a complex multifactorial pathogenicity including osteoarticular, neurological and psychological issues. Everyone agrees that the management of these patients should be multidisciplinary including physiotherapy, occupational therapy, psychotherapy and medication.

Case report We are sharing our experience with two severe cases of paediatric CRPS type I involving the foot, a boy and a girl aged 12 and 11 respectively at the time of diagnosis. Symptoms were hyperalgesia, oedema, bone demineralisation on the radiological exams and a disturbed psychological profile. After the failure of different outpatient treatments, we decided to hospitalise them in the Department of Paediatrics Orthopaedics. The protocol of treatment followed a very strict and intensive daily schedule including multiple therapies in physiotherapy and occupational therapies (balneotherapy, music therapy, progressive desensitization, TENS, walking rehabilitation), the use of pain killers, a follow-up by a paediatric psychiatrist, a referent nurse, and a limitation to the family visiting hours. After 1 to 2 weeks, a significant improvement was seen and after 6 months, pain had disappeared and weight-bearing was possible for both children.

Discussion To this day we do not know the intensity and duration necessary to treat efficiently a paediatric CRPS. The hospitalisation is considered as the last resort for the management of CRPS, but it allows a close observation of the patient, the opportunity to take her/him out of his family and an intensive multidisciplinary treatment that is impossible as an outpatient. The precise factors allowing the treatment's success are still not clear, but they could be a combination of intensive therapy and/or the withdrawal of the patient from his family. Nonetheless it seems that a strict and intensive protocolled schedule, as an inpatient benefits the management of severe cases of CRPS.

Keywords CRPS; Paediatrics; Inpatient treatment

Disclosure of interest The authors have not supplied their declaration of conflict of interest.

Further reading

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