P122-e
The cognitive efficiency of the patients affected by DM1
A. Flucher a,*, S. Fedun b, I. Nardi b, F.-C. Boyer c
a Unité de médecine physique et réadaptation, hôpital Sébastopol, CHU de Reims, 48, rue de Sébastopol, 51092 Reims cedex, France
b Unité de pneumologie, hôpital Maison-Blanche, CHU de Reims
Université de Reims Champagne-Ardenne EA 3798, centre de référence MNN cernest, hôpital Sébastopol, CHU de Reims
*Autor correspondent.
Adresse e-mail : aurelie.flucher@sfr.fr
Keywords : DM1; CTG; Transmission; Cognitive efficiency; Educational level
Introduction. – Literature data are contrasted to clarify the relationship between global cognitive efficiency, the number of repetitions abnormal nucleotides triplet (CTG) and the mode of transmission in myotonic dystrophy type 1 (DM1). It is recognized that mental retardation is constant in pediatric forms of DM1. However, the presence of a cognitive impairment, and a association to the CTG in adult forms is still debated (Kaminsky and Pruna, 2012). Angeard and coll. (2011) showed a significant relationship between cognitive impairment and maternal transmission and a link between cognitive decline and the number of repetitions CTG.
Patients and methods. – Patients affected by DM1 were estimated to the CHU in Reims. We studied the global cognitive efficiency (WAIS IV), executive function (WCST, Stroop, TMT, Hayling, verbal Fluences) and the relationship between these results and the number of CTG, age, sort of transmission and that the educational level of volunteers.
Results. – Eighteen patients (13 women) are counted. The mean age is 44,2 years ± 15 years (SD). The average of the repetitions CTG is 514 ± 384 (SD). The age is correlated to the WCST. The scool level (mean = 8,78 ± 4,54 (SD)) is correlated to the all results of the WAIS IV. Only subtests Symbols and Code of the WAIS IV are associated among repetitions CTG.
Discussion. – We did not find association between the repetitions CTG and the verbal, visual, mnestic or executive cognitive capacities. We also find that the cognitive profiles and the repetitions of triplets are more heterogeneous in case of maternal transmission.
http://dx.doi.org/10.1016/j.rehab.2013.07.1079

P124-e
Preliminary study using galvanic vestibular stimulation (GVS) to reduce unilateral spatial neglect (USN)
A. Ruet a,*, C. Jokic b, P. Denise c, F. Leroy d, P. Azouvi a
a AP–HP, hôpital Raymond-Poincaré, service de MPR, université de Versailles-Saint-Quentin-en-Yvelines EE4497, 104, boulevard Raymond-Poincaré, 92380 Garches, France
b Université de Normandie, Inserm, U 1075 COMETE, 14032 Caen France
c CH Aunay sur Odon, France
d Université de Normandie, Inserm, U 1075 COMETE, 14032 Caen France
*Corresponding author.
E-mail address: alexis.ruet@gmail.com
Keywords: Stroke; Spatial neglect; Galvanic vestibular stimulation
Objectives. – To study feasibility of GVS in a rehabilitation program, and determine optimal stimulation modalities and GVS effect duration.
Material/Patients and methods. – Prospective pilot study of four patients with stroke for at least 2 months. All patients received three types of stimulation (Sham, right cathodal-left anodal, right anodal-left cathodal) in a cross-over design. Two tasks were studied: a bisection of 20 cm lines (French neglect evaluation battery) and a stars cancellation task from the Behaviour Inattention Test (BIT). Tasks were repeated before, during, immediately after and 10 min after each stimulation type.
Results. – GVS is easy to perform during a rehabilitation program. No significant effect of GVS was found in group analyses. Nevertheless two patients improved their test results during right cathodal stimulation.
Discussion. – Right cathodal stimulation seems to be more effective than left cathodal stimulation on spatial attention tasks, as described in previous publications. Given the small sample of the study, individual variability could have hidden GVS effects. Other neglect evaluation tests with higher sensitivity for performance variations could be used. Further studies are necessary to document the efficacy of this seductive new NSU rehabilitation technique.
http://dx.doi.org/10.1016/j.rehab.2013.07.1081