

specific mutation was not clearly established. Our familial cohort proves beyond doubt that the T653i is a pathogenic mutation.

PO-0803 WITHDRAWN

PO-0804 COGNITION IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

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Background Attention deficit hyperactivity disorder (ADHD) is the condition which occurs approximately in 5% of school aged children. The diagnostic tool which will help clinicians to make the precise diagnosis is still absent. Thus child neurologists as well as neuropsychiatrists attempt to seek alternate methods of diagnosis and treatment. The neurophysiologic approaches especially event-related potentials (ERPs) are mostly valuable from this point of view. The later response of ERPs (P3) reflects the most important parts of executive functioning frequently affected in ADHD children—the process of mental effortfulness to select the appropriate behaviour and decision making. Besides the diagnosis the treatment of ADHD is also the point of concern. In recent years EEG biofeedback (Neurofeedback _NF) have become the alternative treatment.

The aim of our study was assess the changes of EPRs after NF therapy.

Methods We have examined 14 patients with ADHDcom without any drug. Age range was 9–12 years. The children were divided into 2 subgroup: the first ADHDcom-1 (6 children) were children with NF treatment and the second subgroup of ADHDcom-2 (8 children) were non treated ones.

Results We have found the significant improvement of P3 in ADHD-1 compared with ADHD-2 while NF was non effective for earlier response like N1.

Conclusions NF can positively affect on the P3 which is very important in ADHD children as P3 reflects the speed of information processing as well as selection of appropriate action and decision making which are frequently impaired in ADHD children.

PO-0805 CONVERGENCE INSUFFICIENCY IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER

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Background and aims Near Point of Convergence (NPC) is used to diagnose Convergence Insufficiency (CI), and the existence of common symptoms between CI and Attention Deficit Hyperactivity Disorder (ADHD) has been suggested as an important aspect to be investigated. The aims of this study was to analyse NPC measurement in children with ADHD and the presence of common symptoms between ADHD and CI through the application of standardised questionnaires and to establish the percentage of individuals that scored questions in common between the ones applied.

Methods A transversal study was performed between June and September 2013, with students from 7 to 17 years old, with

previous diagnosis of ADHD in which NPC measure was realised and two previously validated questionnaires were applied: one for triage of CI-CISS symptoms and other for the diagnostic criteria to ADHD – MTA-SNP-IV. The data was analysed using SPSS v.20 software.

Results Seventy-five students were accepted on the study, 62 (82.7%) male and 13 (17.3%) female, with age of 11.24 ± 2.33 years old. Mean to NPC was 17.19 cm. NPC was altered in 85.3%. When NPC measure was >5 cm, both questionnaires were positive in 92% of students and 56% of scored questions in common between the two ones.

Conclusions This study indicates a high prevalence of CI in the population with ADHD, and shows an overlap of symptoms that were highlighted by comparing the questionnaires applied, suggesting the need to introduce the ocular muscles examination in children with diagnosed or suspected ADHD.

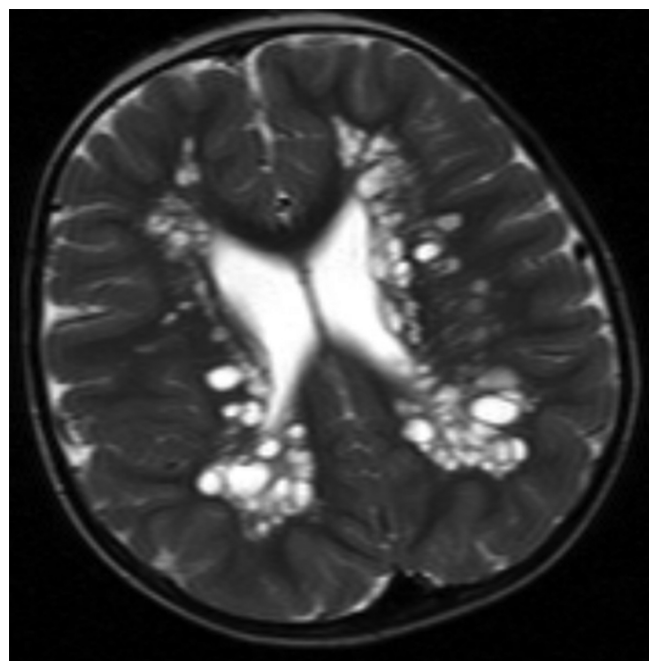
PO-0806 MULTI-CYSTIC WHITE MATTER ENLARGED VIRCHOW ROBIN SPACES IN A 5-YEAR-OLD BOY

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Virchow–Robin spaces (VRS) are perivascular, pial-lined areas in the brain that surrounds small arteries and can be seen on brain magnetic resonance imaging. VRS are typically less than 5 mm in diameter and accepted as normal anatomical structures. VRS are usually asymptomatic, but if there is an expansion to the brain parenchyma, various clinical symptoms can be seen associated with the mass effect.

A 5-year-old boy presented with a complaint of developmental delay. He had relative macrocephaly, hair with a double crown, and clinodactyly of the middle phalanx of both the fifth fingers. He had dysmorphic facial features, including triangular



Abstract PO-0806 Figure 1