with treadmill and ergocycle. *Discussion:* The patient is a young female in the productive age, she work as a teacher in elementary school. She has good compliance to do the exercise that we give. Right now she can walk independently with hemiparetic gait and still have endurance problem. We continue to give her endurance exercise and gait training to improve her gait pattern.

0522PP084

EFFECTS OF EEG BIOFEEDBACK IN THE TREATMENT OF ATTENTION DEFICITS IN CHILDREN WITH CEREBRAL PALSY: A PRELIMINARY STUDY

Yuh-Chuan Chen^{1,2}, Chia-Ling Chen^{11,2}, Pei-Ying Chan^{2,3}, Jean-Lon Chen², Wei-Hsien Hong⁴, Alice May-Kuen Wong^{1,2} Graduate Institute of Early Intervention, Chang Gung University, ²Physical Medicine and Rehabilitation, Chang Gung Memorial hospital, ³Department of Occupational Therapy, Chang Gung University, ⁴Department of Sports Medicine, China Medical University, Taiwan

Purpose: Cerebral Palsy (CP) often accompanies with other problems, such as attention deficits. EEG biofeedback has been used as a treatment for children with attention deficits or mental retardation. This research project was aimed to investigate the effects of EEG biofeedback in the treatment of attention deficits in children with CP. Materials and Methods: Twelve children with spastic CP associated with attention deficits (4-12 years) were randomly assigned to receive EEG-biofeedback training (n=6) or to the control (n=6) group. The EEG biofecdback program was carried out on the basis of 1 h/day, two days/week, for 10 weeks (a total of 20 sessions). The Continuous Performance Test (CPT) and Conners' Rating Scale (CRS) were used as the outcome measures.. Results: The preliminary analysis revealed that EEG-biofeedback group showed a trend of improvement in the CRS subscores (psychosomatic problem, impulsivty-hyperactivity) than control group, however, it did not achieve significant differences between two groups. For CPT measures, EEG-biofeedback training induced greater gains in the hit-reaction time subscores than control intervention. However, there were no significant differences in the Omissions or Comissions subscores between the EEG-biofeedback and control groups. Conclusion: These findings may imply there was a trend of improvement in the attention problems for children with CP after EEG-biofeedback training, but more subjects are needed to draw a conclusion.

0522PP085

POST-OPERATIVE ASSESSEMENT OF ACTIVITIES OF DAILY LIVING AFTER SURGICAL REPAIR OF ARTHROSCOPIC ROTATOR CUFF

Satoshi Shimo, Yuto Sakamoto, Gaku Hosaka, Koubun Watanabe

Fuefuki Central Hospital, Fuefuki-city, Yamanashi, Japan

Purpose: This study aimed to assess activities of daily living (ADL) after surgical repair of arthroscopic rotator cuff by the Quick Disabilities of the Arm, Shoulder, and Hand questionnaire (Quick DASH) compared to two conventional assessments in japan, as the Japanese Orthopedic Association (JOA) score and the barthel index (BI). Materials and Methods: A 70-year-old man could not raise his right upper limb. This definite diagnosis using MRI was supraspinatus tear with fatty infiltration of the muscle belly. Arthroscopic rotator cuff repair using the single-row technique. After surgery (AS) to protect the repair, the arm and shoulder was immobilized in upper extremity orthosis for 6 weeks. The passive range of motion (ROM) into flexion, internal rotation and external rotation began the next day AS. The active ROM began 6 weeks AS. The assessments of ADL were assessed with Quick DASH, JOA score and BI every week from 6 weeks to 20 weeks AS. Results: At 6 weeks AS, Quick DASH was still 36 points because that this assessment kept high points about disability of "hard house work". At the same time, JOA score was 91 points and BI was 100 points, these scores

were enough as a good ADL. At 20 weeks AS, his disability about "hard house work" made improved so that all disability parts of Quick DASH became 0 point. On the other hand, the conventional two assessments were almost same compared to at 6weeks, as that JOA score was 95 points and BI was 100 points. *Conclusion:* Quick DASH is an easy-to-use and sensitive to make an outcome of rehabilitation after surgical repair of arthroscopic rotator cuff combined with conventional assessments (JOA score and BI). This approach of Quick DASH could make also good benefits to save time and costs of out-patients in municipal hospital.

0522PP086

LEFT HEMIPARALEXIA IS NOT DERIVED FROM LEFT HEMINEGLECT BUT FROM DISCONNECTION OF NEURAL PATHWAY FOR VISUAL WORD FORM PROCESSING

Chunlei Shan¹, You Wang², Ting Wu³, Wenchao Yi¹, Wenli Chen¹, Fang Cong¹, Xuchu Weng⁴, Jianan Li¹

Department of Rehabilitation Medicine, First Affiliated Hospital of Nanjing Medical University, ²Department of Radiology, Jiangsu Province Official Hospital, ³Department of Neurology, First Affiliated Hospital of Nanjing Medical University, ⁴Laboratory for Higher Brain Function, Institute of Psychology, Chinese Academy of Sciences. China

Purpose: To further clarify the two controversial explanations of left hemiparalexia (reading errors in left part of words), one is disruption of visual word form processing pathway, and the other is left hemineglect dyslexia. *Materials and Methods*: A patient KY, with infarctions in the splenium and the left ventral medial occipitotemporal area, accepted a series of cognitive neuropsychological tests (e.g. reading Chinese characters presented tachistoscopically in central or left/right visual field (VF), lexical decision, gap direction (up, down, right, left) judgment of modified Landolt's rings presented simultaneously in left and right VF, gender judgment of Chimeric faces (half male half female)) and multimodal MRI examinations (e.g. high resolution structural MRI, Diffusion Tensor Tractography (DTT) and functional MRI (fMRI)). Results: KY made reading errors in the left part of characters presented in central VF (left hemiparalexia) and in the whole characters presented in left VF (left hemialexia). Meanwhile, he performed abnormally in lexical decision. However, he made comparable correct gap direction judgment no matter the Landolt's rings were in left or in right VF. Furthermore, KY made gender determination significantly basing on the left half face of chimeric faces. DTT revealed the disconnection of splenium pathway, critical for visual information transmission between two hemispheres. fMRI indicated characters in the left VF could not activate the visual word form area(in left lateral midfusiform cortex). Conclusion: All findings above are in consistence with the idea that left hemiparalexia is not derived from left hemineglect but from disconnection of visual word form processing pathway.

0523FP24

A PROMOTER POLYMORPHISM (rs3806798, -473T/A) OF IL15 IS ASSOCIATED WITH ISCHEMIC STROKE IN THE KOREAN POPULATION

Jihea Bark ¹, Jinmann Chon ¹, Dong Hwan Yun ¹, Joo-Ho Chung ²,

Department of Physical Medicine & Rehabilitation, Kyung Hee University, Seoul, 2 Department of Pharmacology and Kohwang Medical Research Institute, Kyung Hee University, Seoul, (Korea)

Purpose: Interleukin-15 (IL15) is a cytokine that affects T-cell activation and proliferation. The aim of this study was investigated whether promoter single nucleotide polymorphisms (SNP) (rs3806798, -473T/A) of IL15 were associated with the development and clinical features of ischemic stroke (IS). Materials and Methods: We recruited 291 control subjects and 121 IS patients. All IS patients were divided into clinical