REDUCED GLUCOSE METABOLISM IN LEFT LATERAL PARIETAL CORTEX OF A POSTTRAUMATIC STRESS DISORDER PATIENT: A CASE REPORT

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Introduction: Individuals with posttraumatic stress disorder (PTSD) often have symptoms of re-experiencing traumatic life events, recurring nightmares, hyper arousal and insomnia. Evidence is increasing that stress-related hyperglutamatergic states may contribute to dissociative symptoms and neurodegeneration in temporo-parietal cortical areas. Cognitive performance is also be effected in some of the traumatized patients. We are going to present a PTSD case who demonstrates significant memory impairment.

Case: 38 years-old, male patient. He had experienced combat related traumatic life events June in 2009 and diagnosed with PTSD according to DSM-IV criteria. Disturbance in short time memory, perception, attention, concentration deficiency was observed in the clinical interview. As a result of cognitive assessment, calculating and remembering subtests were lower than the others so it could be associated with cognitive impairment. To evaluate the organic brain pathology CT was applied and it was within normal limits. After than PET was conducted to reveal the metabolic abnormalities. Left parietal cortical global hypo-metabolic activity, global hypometabolism in temporal cortex and regional hypometabolism in medial parietal cortical regions was demonstrated. He has been treated and fallowed up for two years and provided significant improvement in PTSD symptoms but cognitive impairment was still showed constancy.

Discussion: <u>It is well known that left parietal and temporal cortical region would be associated with impaired memory performance. The areas that we have found at PET are known to be involved in episodic memory consolidation and retrieval. Comorbid PTSD and hypometabolism in lateral cortical region has not been well documented in the literature.</u>