Brain SPECT in a patient with catatonia: Case report

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BACKGROUND

Catatonia was originally described as a psychomotor disease by Karl Ludwig Kahlbaum in 1874. Initially it was considered as the motor manifestation of schizophrenia. However, during the last decades it has been documented a greater prevalence of catatonic symptoms in affective disorders.

RESULTS

In June 2015 he received his first psychiatric care. He referred feelings of sadness, with spontaneous crying, feelings of frustration, guilt and anhedonia. He was diagnosed with a moderate depressive disorder, starting sertraline and alprazolam, which showed an improvement in his mood.

Catatonia would be associated with possible dysfunction of the frontal lobes. According to the literature, the premotor and motor cortex would be functionally altered due to abnormalities in the cortical GABAergic control, which would also produce affective and behavioral symptoms.

In June 2017, there was a psychomotor slowing and generalized stiffness, which generated difficulty feeding due to jaw stiffness, so they decided to take it to the emergency service.

Mental examination: Conscious, disoriented in time, blocking of thinking. Ecolalia and verbigerations. Blunted affect. Mutism with stupor, maintenance of strange postures, waxy flexibility.

Bush-Francis scale for catatonia: 42.

The patient was treated with diazepam at 40 mg / day and venlafaxine 150 mg / day.

OBJECTIVES

Describe the neuroimaging findings of Brain Single-Photon Emission Computed Tomography (SPECT) of a patient with catatonia.

MATERIAL AND METHODS

We report the case of a 49-year-old male patient, who presented severe depressive and catatonic symptoms simultaneously.

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Figure 1. Brain SPECT of the Patient. Signs of global decreased perfusion and in the frontal and parietal lobes of frontal predominance (dorsolateral, prefrontal orbitofrontal). Discrete greater perfusion in temporal lobes of left predominance. These findings are similar to those reported in other cases, where it is documented in studies of functional neuroimaging of catatonic patients: right inferior lateral prefrontal cortex hypoperfusion, right posterior parietal hypoperfusion, also left temporal hypoperfusion and asymmetric uptake in basal ganglia with left hypoperfusion (1-3).

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