



P.1079 Post-Covid 19 syndrome and quantitative electroencephalography changes

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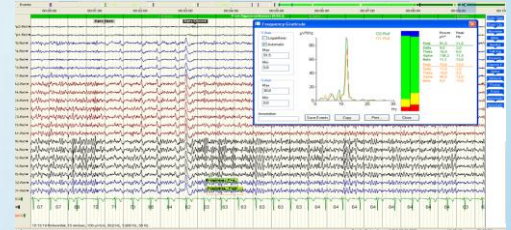


Introduction: As a psychiatrists we are facing the mental health issues of prolonged stress but also with psychiatric complications in post-acute Covid-19 syndrome patients. It is known that neuropsychiatric abnormalities are present and persist in 30-40% of such patients with diverse pathophysiology mechanisms [1,2]. We can use quantitative electroencephalography (QEEG) as a non-invasive method for registration of changes in CNS functionality and aim is to present several cases.

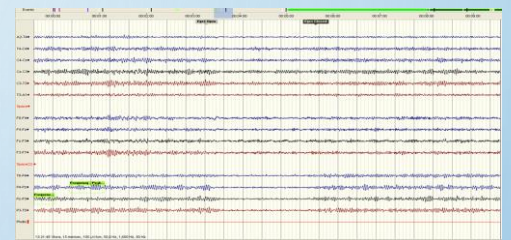
Methods: QEEG changes were analyzed in relation to other parameters recorded on polygraph channels such as pulse-oximetry, pulse and arterial tension. Laboratory testing was provided before the EEG recording and we take into account the time from the infection and the present symptomatology that persisted in post- Covid 19 syndrome measured with clinical scales.

Table 1. Demographic and clinical characteristics of the patients

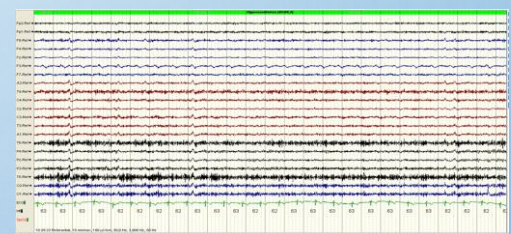
CASE	No. 1	No. 2	No.3	No.4	No.5
Age	69	54	61	45	81
Gender	Female	Male	Male	Male	Male
Diagnosis [ICD-10]	F 06.7	F 43.1 F 06.3	F 43.9 T 42.4	F 30	F 06.8
Psychopathology	Memory concentration difficulties	Depressive, omatic complaints	Depressive, paranoid symptoms	Manic symptoms	Confuse, delirium
Time after Covid 19 infection	60 days	35 days	90 days	120days	50 days
Previous somatic illnesses [ICD-10]	I 10 E 03	/	/	/	I 10 I 42.9



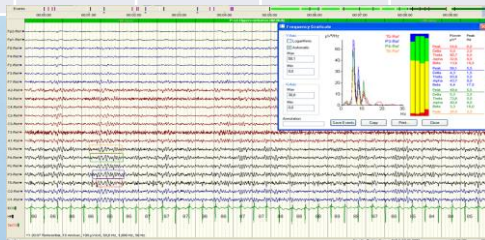
Case 1.



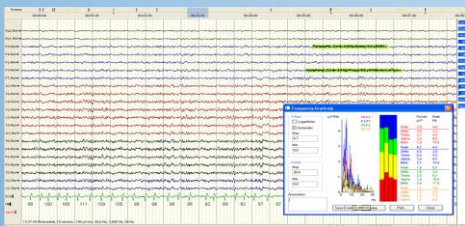
Case 2.



Case 3.



Case 4.



Case 5.

Results: Our patients presenting post-Covid psychiatric symptomatology had no previous psychiatric history and treatment. They had changes in EEG background activity that was verified with quantitative analysis (QEEG). Laboratory parameters and neuroimaging of the brain did not reveal any severe abnormality.

Conclusions: Electroencephalography as a method especially with quantitative analysis of the obtained signals could be of benefit in following the changes in the brain functionality after Covid-19 infection. As a non-invasive technique it can be performed several times during the course of the illness and observed alterations could be compared over time. We can correlate QEEG parameters with neuroimaging examinations if performed or with altered laboratory test values.

The author have no conflict of interest to declare

References:

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