

Impact of Covid-19 on essential tremor and dystonic tremor: experience of an Italian centre

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Objective: To assess the impact of Covid-19 on essential and dystonic tremor.

Background: Covid-19 had a negative impact on movement disorders [1-2-4], but there are no studies on ET and DT. The only present studies regard the management of DBS and of botulinum toxin [3-5].

Methods: Self-administered survey, based on Hamilton Depression and Anxiety Rating Scale, SARA scale, Hospital Anxiety and Depression Scale. Motor evaluation (TETRAS) before and after lockdown. We compared transcranial magnetic stimulation-evoked cortical potentials (TEPs) from the M1 and SMA between 15 PD patients tested off (OFF) and on (ON) medication and 12 healthy controls (HCs) and investigated possible correlations with bradykinesia tested clinically.

Results: We analysed 26 patients (20 ET, 6 DT). Depression worsened in 57,7% of them whereas anxiety in 26,9% and sleep quality in 34,6%, as well as fear. For 15,4% sexual life worsened. All these features are related between them and with the patient's level of education: 80-100% of patient who felt more depressed and had a worse sleep quality have a high level of education. Sleep quality is related to an increase in depression as well (88,9%). 19,2% of patients felt their difficulty in concentration increased during lockdown. This is related to the increase in anxiety (71,4%). None of the features is related to TETRAS score or to years of age or of disease, nor to the type of disease. A minority of patients had difficulty in finding their doctors, or their drugs. 38,4% of patients know what telemedicine is, but only 15,3% used it for a teleconsultation. 15,3% of patients said their health decreased, whereas 42,3% said quality of life did. 15,3% managed to practice physiotherapy during lockdown, and no one started playing videogames in substitution. Only one patient followed a physiotherapy video lesson. For most patients (15,3%) the major problems during lockdown were the impossibility to go to the hospital and the lack of social relationships.

Conclusions: Despite the little number of patients analysed, we can highlight Covid-19 had a negative impact on non-motor symptoms of ET and DT, with quality of life repercussions.

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