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119829
Clinical correlates and outcomes of coronavirus disease in a cohort of myasthenia gravis patients

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Background and aims
Subjects with Myasthenia Gravis (MG) could be at risk for severe complications with Coronavirus Disease (COVID-19), even though few data are available. The aim of the present study is to describe the clinical characteristics and outcomes in patients with MG and COVID-19 and identify clinical factors associated with COVID-19 severity and risk of hospitalization, requirement of respiratory support and death.

Methods
We retrospectively analyzed demographic variables and clinical characteristics of 63 MG patients (F 47.6%; M 52.4%, mean age 53 ± 16 y) who were diagnosed with COVID-19 based on a PCR test from a nasopharyngeal swab and/or SARS-CoV-2 serology. Main outcomes were the need of hospitalization, the requirement of respiratory support and death for COVID-19.

Results
Overall 5 patients deceased for Covid infection (7.9%). As in general population, older age (p < 0.001) and hypertension were independently associated with hospitalization, whilst obesity (p 0.022) was associated with poorer outcome disregarding hospitalization. Only Myasthenia Gravis Foundation of America (MGFA) class was correlated with worst outcome (p 0.010). Interestingly, no correlation was found between immunosuppressant treatment at baseline and severity and outcome of infection.

Conclusions
Most MG patients in this study fully recovered from Covid-19 and experienced milder forms of infection. Neuromuscular disease was well controlled, at most with increasing steroid dose briefly. Independent risk factors correlated with severity disease and poor outcome were similar to general population. Patients with highest MGFA class have an additional risk for severe disease course and deserve special attention.

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119830
Neurocognitive manifestations of SARS-CoV-2: A narrative review of mechanisms

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Background and aims
Since the outbreak of COVID-19 that is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in 2020 throughout the world, a lot of aspects of people's lives are affected including their psychological status. Follow-up assessment of survivors of this infection showed that they had multiple psychological disorders including depression, panic attacks, obsessive compulsive disorder, and post-traumatic stress disorder.

Methods
A Narrative Review of Mechanisms.

Results
It is estimated that more than one-third of patients with COVID-19 experience neuropsychiatric symptoms, including headache, paresthesia, and disturbed consciousness. Among patients affected by COVID-19, there are different mechanisms that can cause cognitive dysfunction. COVID-19 can affect the central nervous system (CNS) directly by invasion and indirectly by inducing hypoxia, inflammation, and delirium. The pandemic and fear of infection can also cause anxiety which impairs the cognition as well.

Conclusions
By assessing the patients' cognition and knowing the higher probable cause of cognitive impairment, we can form a better strategy to better treat the impairment. Cognitive behavioral therapy can be effective in reducing the anxiety and cognitive rehabilitation therapy (CRT) can be used to lower the detrimental effects of cognitive impairment caused by COVID-19.

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119831
SARS-CoV2 pandemic and lockdown reported consequences on people with multiple sclerosis

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Background and aims
During SARS-CoV-2 pandemic people with multiple sclerosis (PwMS) may experience a worsening due to increased anxiety and depression, reduction in rehabilitation, and less strict connection to MS centres. The aim of our study was to describe the self-reported impact of SARS-CoV-2 pandemic and lockdown on PwMS.

Methods
On June 2020, we enrolled PwMS who underwent teleconsult during the lockdown phase (March–May 2020). Self-rated worries for pandemic, perception of change in anxiety, depression, fatigue and spasticity was asked, as well as changes in weight, physical activity and food intake. We compared patients with and without reported increase in: spasticity, anxiety, depression and fatigue. Binary logistic regression analyses were applied including significant variables. Statistical significance was set at p < 0.05.

Results
Ninety-three MS patients were enrolled (71% female, 77% RR, median age 50.3 y, mean disease duration =13 y). Many patients reported an increase of anxiety (36.6%), depression (34.4%), fatigue (26.9%) and, spasticity (18.3%), weight (47.3%) and 63.4% of patients reported particularly worrisome for the pandemic and the perception of greater impact on PwMS of the pandemic compared to general population, respectively. In the multivariate models, anxiety was predicted by depression, particular worries for SARS-CoV2 pandemic and reduction in physical activity; depression by anxiety; fatigue by reduction in physical activity; spasticity by EDSS.
Conclusions
The self-reported impact of pandemic on pWMS was deep in terms of increased depression, anxiety, fatigue and spasticity, mainly related to reduction in physical activity and pre-existing disability.

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119832
Telemedicine for routine multiple sclerosis follow-up during SARS-CoV2 pandemic: A single center experience

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Background and aims
Telemedicine in multiple sclerosis (MS) is promising, particularly for patients with high disability and difficulties to reach the treating centre. During SARS-CoV2 pandemic, teleconsults are gaining a central role. The aim of the present study was to report our single-center experience and to verify the effectiveness of teleconsults in diagnosing relapses and rating progression.

Methods
During the first lockdown phase (March–May 2020) all the pre-planned consults were converted in teleconsults. The evaluation focused on new symptoms or worsening of known symptoms, disability (PDDS), patients' satisfaction of such assessment modality (rated form 0 to 10). Patients were then re-evaluated in person within 6 months. We verified the changes in disability and the accuracy of teleconsults in diagnosing MS relapses.

Results
Eighty-four patients underwent teleconsult and were re-evaluated in person within 6 months after the lockdown (69% female, mean age 50.5 ± 11.0 y, mean disease duration 13.0 ± 9.7 y, 78.6% relapsing-remitting disease form, 76.2% on disease modifying treatment). Median pre-lockdown EDSS was 1.5 (range 0–8) median EDSS post lockdown was 2 (1–8) (p = 0.836); median PDDS during lockdown was 1.5 (0–8). A single disease relapse was detected with teleconsults. In the post lock-down in person evaluation no additional undiagnosed relapses were detected. Patients' reported satisfaction was very high (median 10, range 8–10).

Conclusions
Teleconsult in MS patients allowed us to guarantee a regular neurological follow-up during pandemic lockdown. No unreported relapses were missed, no significant disability changes were reported nor detected compared to pre-lockdown evaluation. Finally, patients' satisfaction of this modality was very high.

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119834
The probability of neurocognitive disorders in patients at the postcovid stage

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Background and aims
Актуальность постостровных расстройств у больных обусловлена отсутствием данных о механизмах возникновения нейрокогнитивных расстройств.

Methods
Material and methods of research. We examined 22 people who had suffered from COVID-19, which made up two groups. The first main group – 10 patients with clinical signs of mild cognitive impairment (LCN), the second comparative group-12 patients without clinical signs of LCN. To detect LCN, neuropsychological tests MMSE were used, tests were performed: "establishing patterns", visual-spatial function, semantic mediation and generalization. In the comparative analysis, the nonparametric criterion χ² was used, based on the null hypothesis that there are no differences between the compared groups.

Results
The results obtained. If in group 2 there was a positive dynamics of cognitive functions of patients in the form of a statistically significant (p < 0.05) increase in the number of correctly completed tasks on the MMSE test on average 27.9 ± 1.3, D = 10.3%; p < 0.05, ‘+’ 2.6 points, then in group 1 there was no positive dynamics (p < 0.05). In group 2, there is an increase in words called in one repetition, averaging 1.3 words (20.3%), while in group 1 patients there is a negative trend (p < 0.05). In the “digit repetition test”, the increase in the total score of reproduced digits both in the forward