



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

119873**Neurological manifestations in patients with symptomatic COVID-19 admitted to the Bafoussam Regional Hospital, Cameroon**

Yannick Fogang Fogoum^a, Michel Noubom^b, Paul Cédric Mbonda^c, Daniel Gams Massi^d, Joseph Kamtchum-Tatuene^e, ^aFaculty of Medicine and Pharmaceutical Sciences, Neurology, Dschang, Cameroon, ^bFaculty of Medicine and Pharmaceutical Sciences, Clinical Biology, Dschang, Cameroon, ^cFaculty of Medicine and Biomedical Sciences, Neurology, Yaoundé, Cameroon, ^dDouala General Hospital, Internal Medicine, Cardiology, Douala, Cameroon, ^eUniversity of Alberta, Neuroscience, Edmonton, Canada

Background and aims

Although the main manifestations of COVID-19 are respiratory, several neurological symptoms and complications have also been reported. The pandemic seems to have some epidemiological specificities in sub-Saharan Africa, and this may be reflected in the type and frequency of neurological symptoms. This study aimed to report neurological manifestations associated with symptomatic COVID-19 in a sub-Saharan African setting.

Methods

We conducted a retrospective review of symptomatic PCR-confirmed COVID-19 cases admitted to the Bafoussam Regional Hospital between March and September 2020. Patients' files were reviewed at discharge by a consultant neurologist. Socio-demographic characteristics, co-morbidities, symptoms on admission, neurological symptoms during hospitalization, management, and in-hospital outcome were recorded. Comparisons between patients with and without neurological symptoms were performed using Fisher's exact and Mann-Whitney U test.

Results

We enrolled 177 symptomatic patients (68% men). Mean age was 54.6 ± 17.8 years (range 2–99 years). Co-morbidities were present in 57.6% of patients, including hypertension (27.1%) and diabetes mellitus (25.4%). Neurological symptoms were found in 113 (63.8%) patients. The most frequent were headache (39.0%), myalgia (35.6%), anosmia (11.9%), impaired consciousness (10.7%) and delirium (5.6%). Regarding the presenting symptoms, fever was more frequent in patients with neurological symptoms than in those without (81.4% vs. 50.0%, $p < 0.001$), while digestive symptoms were less frequent in patients with neurological symptoms (0.9% vs. 9.4%, $p = 0.004$).

Conclusions

Neurological manifestations are frequent and heterogeneous in patients with symptomatic COVID-19. Further studies are needed to clarify the pathophysiology of neurological symptoms in COVID-19 and their impact on patients' long-term outcome.

doi:10.1016/j.jns.2021.119873

119874**The claustrum sign in a parainfectious COVID-19 encephalitis**

Emanuela Laura Susani^a, Lorenzo Saraceno^a, Angelo Cascio Rizzo^a, Davide Motta^b, Alessandra Protti^a, Silvia Squarza^c, Cristina Erminio^c, Elio Clemente Agostoni^a, ^aASST GOM Niguarda, Neuroscience-Neurology & Stroke Unit, Milano, Italy, ^bASST GOM Niguarda, Malattie Infettive, Milano, Italy, ^cNiguarda Hospital, Neuroradiology, Milano, Italy

Background and aims

Various neurological symptoms and manifestations associated with COVID-19 have been described. Imaging findings on brain MRI

scans were reported as being unspecific, apart from acute necrotizing encephalopathy. Here, we present the first Italian case of parainfectious autoimmune encephalitis in a COVID-19 patient with a specific MRI pattern, responsive to steroid treatment.

Methods

An otherwise healthy 61-year-old woman presented to the Emergency Department for an acute confusional state with drowsiness and impaired speech.

Results

Even in the absence of fever or respiratory symptoms a RT-PCR test for SARS-CoV-2 using a nasopharyngeal swab was positive. Chest CT disclosed a mild interstitial pneumonia. Arterial blood gases was normal. Neurological examination exhibited mutism, slowness in executing orders, bilateral postural tremor, upper right arm weakness. Electroencephalography showed generalized delta slowing. Cerebrospinal fluid analysis revealed normal white-cell count, a mild increased protein concentration with negative test results for neurotropic viruses and also for SARS-CoV-2. Tests in serum and CSF were negative for antineuronal antibodies whereas the serological test for COVID-19 was positive. Brain MRI showed FLAIR hyperintensities bilaterally but especially on the left side of the putamen, the claustrum, the insula cortex and the fronto-temporal cortex, without diffusion reduction or post contrast enhancement. Thus, suspecting an autoimmune encephalitis, a high-dose steroid treatment was started followed by a tapering per OS and a complete clinical and neuroradiological recovery was observed.

Conclusions

The peculiar imaging pattern with the claustrum sign identified in our COVID-19 patient probably reflects an autoimmune phenomenon that might resolve with prompt recognition and appropriate therapy.

doi:10.1016/j.jns.2021.119874

119875**Insomnia in post COVID-19 hospitalized patients**

Raul Anwar Garcia Santos^a, Monica Rodriguez Rodriguez^b, Raul Rodriguez Cruces^c, Ana Sofía Ramírez García Luna^d, David Agustín Fernández Lopez^d, Alan Aldair Ibarra Fernández^d, ^aInstituto Nacional de Enfermedades Respiratorias, Neurology, Mexico City, Mexico, ^bINER/CIENI, Neurology, Mexico City, Mexico, ^cMcGill University, Montreal Neurological Institute, Montreal, Canada, ^dNational Institute of Respiratory Diseases, Neurology, Mexico City, Mexico

Background and aims

to describe the presence of sleep disorders in patients after hospitalization for COVID-, 117 studied people under follow-up at the National Institute of Respiratory Diseases (INER) in the outpatient clinic. Patients with mild, moderate or severe ventilation.

Methods

To descriptive the analysis of Mexican population patients with mild, moderate and severe symptoms of COVID-19 was carried out. A multiple regression model with backward selection was carried out to evaluate the effects of each of the neurological symptoms as risk factors in the development insomnia. P values less than 0.05 were considered statistically significant.

Results

117 subjects were included, 36 (31%) women and 81 (69%) men, 58 ± 13 years of age, divided between groups according to severity, mild $n = 17$ (15%), moderate $n = 27$ (23%) and Severe $N = 73$ (62%) The comorbidities between the included groups did not present statistical differences, DM 2, overweight, Obesity, morbid obesity,