



WEB OF SCIENCE

ISSUES OF THE REHABILITATIVE MANAGEMENT IN PATIENTS WITH CHRONIC, PRE-EXISTING NEUROLOGIC CONDITIONS, DURING COVID-19 ERA

ANGHELESCU Aurelian^{1,2}, MAGDOIU Anca Magdalena³, MUNTEANU Costantin², ONOSE Gelu^{1,2}

Editor: Constantin MUNTEANU, E-mail: office@bioclima.ro

Balneo and PRM Research Journal

DOI: <http://dx.doi.org/10.12680/balneo.2021.452>

Vol.12, No.3 September 2021

p: L123

Corresponding author: ANGHELESCU Aurelian, E-mail: aurelian_anghelescu@umfcd.ro

1. Teaching Emergency Hospital "Bagdasar-Arseni", Bucharest
2. Carol Davila University of Medicine and Pharmacy, Bucharest
3. CMI Dr Magdoiu Anca, Dreptatii 2, Bucharest
4. Master student - Anthropology

Abstract

Coronavirus SARS-CoV2 has emerged as one of the greatest infectious disease health challenges in a century. Rehabilitation of persons with neurological sequelae is a multi-professional/ interdisciplinary endeavor, tailored to each patient's physiopathology and applied throughout the continuum of care. Recovery of acquired pre-pandemic neurological disabilities has raised several main issues during the Covid era. Pre-existing general pathologic conditions (frequently found in the elderly and/ or in candidates for admission to rehabilitation) represent risk factors that make individuals susceptible to worse outcomes from COVID-19 (a more aggressive course and higher mortality rate). A history of cardiovascular disease, including stroke, appeared to induce a worse prognosis in patients infected with SARS-CoV-2. The pre-existing chronic neurologic disease may worsen the prognosis of COVID-19. Patients with baseline cardiac or respiratory dysfunction, those with severe neuromuscular weakness, and those with bulbar weakness due to other debilitating neurologic diseases (amyotrophic lateral sclerosis, multiple sclerosis) are likely to have a more severe course and also may not return to their prior disability baseline.

An increased risk of COVID-19 and higher mortality have been suggested for patients with dementia and also those with active epilepsy. Management of patients with chronic neurologic conditions was significantly impaired during the Covid era. Social/physical distancing and self-quarantine, respectively the severe restriction of the number of beds allocated for rehabilitation (to the detriment of COVID specific pathology), significantly lowered the rate of admission to the rehabilitation departments, which was focused on (preferentially reserved for) acute neurological and/or cardio-respiratory problems. Patients with neurologic disorders were also at a higher risk/rate for readmission after hospitalization for COVID-19 infection. Traditionally, the neurological diagnostic and treatment approach has been face-to-face. However, to protect both patients and healthcare professionals, alternative means of care were implemented during Covid-era. Based on the available IT Apps, telerehabilitation was a useful method to continue the specialized rehabilitative treatment and social interaction. Post-stroke or TBI disabilities (mainly cognitive or logopedic issues), Parkinson's disease patients (with mild and medium severity forms) were successfully supervised with IT methods. Telerehabilitation has its pros and cons issues. Alternative treatments should be considered for patients who develop COVID-19 while taking immunosuppressive therapy. Disease-modifying treatment in multiple sclerosis and myasthenia gravis imposed special precautions. Infection represents a trigger factor for myasthenic crisis (although this emergency has not been reported to be particularly prevalent in patients with COVID-19). Immunoglobulin therapy, complement inhibitor therapy, and plasma exchange are not expected to increase the risk of COVID-19, but such kinds of treatments are not appropriate in all patients. Patients with baseline disabling neurologic disease and those on immunosuppressive therapy must be particularly vigilant about infection control measures, such as social distancing, mask-wearing, and vaccination. The benefits of vaccination to prevent the morbidity and mortality associated with SARS-Cov2 infection greatly outweigh the risk of vaccine-induced thrombotic thrombocytopenia (VITT), because the risk of thromboembolism from COVID-19 infection appears to be higher than the risk of VITT.