NEUROLOGICAL DISORDERS IN PATIENTS WITH CORONAVIRUS DISEASE 2019

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In addition to respiratory symptoms, patients with coronavirus disease 2019 (COVID-19) often have neurological, cardiac, gastroenterological and other symptoms. The most common neurological disorders are headache, myalgia, dizziness, acute cerebrovascular disease, disorders of the senses of taste and smell. We examined clinical symptoms, comorbidities, demographic, hematological, and biochemical parameters of 230 patients who showed neurological symptoms during COVID-19. The diagnosis of COVID-19 was made by rapid antigen or PCR (polymerase chain reaction) test. The diagnosis of neurological disorders was made by neurological examination, computed tomography, electroencephalography, lumbar puncture. The severity of the disease was estimated based on the Australian guidelines for the clinical care of people with COVID-19. The Statistical Package for Social Sciences (SPSS, version 16) was used for statistical data analysis. The probability P < 0.05 was considered significant.

The most common age was 51-60 years (mean 52.7 ± 10.3). A significant majority of patients had fatigue/weakness (95.7%), fever (90.9%), cough (75.7%) and chest tightness/pain (65.2%). Comorbidities were present in 69.6% of respondents. The most common were cardiovascular diseases (90.6%) and obesity (82.5%). Other associated diseases were asthma/chronic obstructive pulmonary disease (50.6%), diabetes mellitus (40%), gastrointestinal (26.9%), psychiatric disorders (16.3%). The significant majority of patients had elevated levels of lactate dehydrogenase, creatine kinase and C-reactive protein (95.7%, 82.5% and 79.1%), as well as leukopenia (82.6%). Significant frequency of neurological symptoms included headache (94.3%), loss sense of smell/taste, myalgia (90.9%, 84.8%, 88.7%). Patients with severe disease were significantly more often older than 50 (78.2%), with comorbidities, dizziness and acute cerebrovascular disease.

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