Methylprednisolone

Drug ineffective: case report

In a retrospective case series involving five patients who were admitted to a hospital in Italy between 13 March 2020 and 27 March 2020, a 69-year-old woman (Patient 3) was described, who exhibited drug ineffectiveness during treatment with methylprednisolone for COVID-19 related encephalopathy.

The woman was admitted to a hospital in Italy for COVID-19. She had mild respiratory distress and received low flow oxygen therapy. Her medical history was significant for bipolar disorder, mild cognitive impairment, drug-induced parkinsonism [*drug not stated*] and type 2 diabetes mellitus. Fifteen days after onset of COVID-19, she started experiencing subacute neuropsychiatric symptoms. She was transferred to another facility in Italy. RT-PCR for SARS-CoV-2 was negative in CSF sample. She was diagnosed with COVID-19 related encephalopathy with inflammatory/immune-mediated pathogenesis. She also developed hypernatremia and prerenal acute kidney injury. Correction of hypernatremia and acute kidney injury did not yield any change in her mental status. On day 13 after the encephalopathy onset, she was initiated on methylprednisolone 1 g/day pulse therapy [*route not stated*]. On day 14 after the encephalopathy onset, her condition worsened. On day 17 after the encephalopathy onset, methylprednisolone was discontinued due to its ineffectiveness. From day 28 to day 32 after the encephalopathy onset, she was treated with immune globulin [immunoglobulin] leading to complete clinical recovery.

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