Lopinavir/ritonavir

Lack of efficacy following off-label use: 2 case reports

In a retrospective case study of 3 patients, two patients (1 man and 1 woman) both aged 79 years were described, who exhibited lack of efficacy during off-label treatment with lopinavir/ritonavir for COVID-19 [routes and dosages not stated].

Patient 1: A 79-year-old man presented with fever and headache, following contact with his COVID-19 positive daughter. His medical history was significant for hypertension and diabetes mellitus. Upon current presentation, a reverse transcriptase-polymerase chain reaction (RT-PCR) confirmed a diagnosis of COVID-19 pneumonia. Later, he was admitted after 5 days of symptom onset and received off-label treatment with lopinavir/ritonavir. Irrespective of treatment, he presented on day 9 of symptom onset with acute respiratory distress syndrome, necessitating mechanical ventilation (lack of efficacy). Thereafter, he underwent bronchoscopy and received corticosteroid therapy with methylprednisolone, which led to a remarkable improvement in his condition.

Patient 2: A 79-year-old woman presented with positive and asymptomatic COVID-19. Her medical history was significant for hypertension, diabetes mellitus, old pulmonary tuberculosis and Guillain Barre syndrome. Further findings (at current presentation) confirmed subsequent COVID-19 pneumonia and she was placed on mechanical ventilation. She received off-label treatment with lopinavir/ritonavir from day 1 of symptom onset; however, the severity of her pneumonia was unchanged (indicating lack of efficacy). Thereafter, she underwent bronchoscopy and received corticosteroid therapy with methylprednisolone, which led to an improvement in her condition.

Kim D-M, et al. Eosinophil-mediated lung inflammation associated with elevated natural killer T cell response in COVID-19 patients. Korean Journal of Internal Medicine 37: 201-209, No. 1, Jan 2022. Available from: URL: https://www.kjim.org/upload/kjim-2020-605.pdf 803656637