

Multiple drugs

S

Lack of efficacy: case report

A 66-year-old man exhibited lack of effect of cefoperazone, colistin, linezolid, meropenem, minocycline, vancomycin and voriconazole for septic shock [*dosages and routes not stated*].

The man, who had hypertension, was admitted to a hospital in China on 11 January 2020 with suspicion of COVID-19. He had symptoms of fever and cough and recent travel history to Wuhan, China. He started receiving off-label treatment with oseltamivir 75mg and interferon α -1b 30 μ g twice daily. He received low/high-flow nasal cannula oxygen. Subsequently, he developed hypoxaemia and shortness of breath. Therefore, he was treated with methylprednisolone and continuous positive airway pressure support. A definite diagnosis of COVID-19 was made, based on chest imaging and positive RT-PCR test. His oseltamivir therapy was switched to off-label ribavirin 500mg twice daily. In the next five days, his body temperature reduced, with less pulmonary infiltrates apparent on the radiograph. However, respiratory symptoms did not improve. On 20 January 2020, hypoxaemia reappeared, requiring invasive mechanical ventilation. He was diagnosed with superimposed bacterial and fungal infections, consisting of *Aspergillus*, *Candida tropicalis*, *Penicillium*, *Pseudomonas maltophilia* and *Acinetobacter baumannii*. He developed septic shock and progressive respiratory failure. Lung consolidation was noted. Therefore, he was treated with meropenem, linezolid, colistin [polymyxin E], cefoperazone, minocycline, vancomycin and voriconazole. He also underwent tracheostomy and off-label therapy with lopinavir/ritonavir and ganciclovir for COVID-19. However, septic shock was found to be refractory to all the antibacterials and antifungals. On 30 January 2020, he received veno-arterio-venous extracorporeal membrane oxygenation, following which his vital signs remained stable. On 31 January 2020, he received convalescent plasma from a recovered COVID-19 patient. For the next 12 days, RT-PCR test showed repeated negative results for COVID-19. On 7 February 2020, intrapulmonary bleeding and obstruction were observed in both the lungs. He developed rapidly deteriorating hypoxaemia, complicated with pulmonary hypertension and right ventricular failure. Thereafter, he underwent organ transplantation. However, he died following uncontrolled loss of blood [*exact cause of death not stated*].

Zhao Y, et al. SARS-CoV-2 persisted in lung tissue despite disappearance in other clinical samples. *Clinical Microbiology and Infection* 26: 1424-1425, No. 10, Oct 2020.
Available from: URL: <http://doi.org/10.1016/j.cmi.2020.05.013>

803505791