## Everolimus/prednisolone/tacrolimus

## COVID-19 infection: case report

A 34-year-old man developed COVID-19 infection during immunosuppressive treatment with tacrolimus, everolimus and prednisolone [routes, dosages and durations of treatments to reaction not stated].

The man was diagnosed with chronic glomerulonephritis 15 years previously, which was progressed to end-stage kidney disease 12 years previously. After a decade of haemodyalisis, he had a cadaveric donor transplant (renal transplant). Thereafter, he had started receiving tacrolimus, everolimus and prednisolone as immunosuppressive therapy. In June 2020, real-time reverse transcription polymerase chain reaction (RT-PCR) confirmed COVID-19. He was hospitalised for 7 days for close follow-up despite mild manifestations. Thereafter, he recovered completely. He was evaluated again in December 2020 due to fever and cough. His nasopharyngeal swab RT-PCR test was positive for SARS-CoV-2 with a cycle threshold value of 26.7. Chest CT scan revealed bilateral infiltrates. A diagnosis of reinfection with SARS-CoV-2 was made. The immunosuppressive therapy was considered as risk factor for episodes of COVID-19 infections.

Thereafter, the man's everolimus was discontinued and the dose of prednisolone was increased. Additionally, he started receiving off label treatment with favipiravir 1600mg twice a day for 1 day, then 600mg twice a day for 4 days. On the day 9 after the initial symptoms, he was admitted to the hospital due to persistent fever. He was treated with off label IV methylprednisolone 10–30mg for 10 days and off label SC anakinra 200-300 mg/day for 8 days for the treatment for COVID-19-related macrophage activation syndrome. Additionally, he received unspecified low-molecular-weight heparins. His inflammatory parameters and fever resolved within few days. On day 10 from the hospitalisation, he was discharged in good condition.

Amikishiyev S, et al. Reinfection with SARS-CoV-2 in a kidney transplant recipient. Transplant Infectious Disease 23: No. 4, Aug 2021. Available from: URL: http:// doi.org/10.1111/tid.13695