

COVID-19 pneumonia in a heart transplant recipient

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Heart transplantation is a therapy of choice for patients with advanced terminal heart failure. A particular problem in these patients represents the titration of immunosuppressive therapy during infection, which is especially true in COVID-19.

We present a case of a heart transplant recipient, who was successfully treated for a severe COVID-19 pneumonia. The patient underwent the orthotopic heart transplantation in 2018 at the age of 52 due to ischemic cardiomyopathy. Early posttransplantation phase was uneventful, and his immunosuppressive regimen consisted of tacrolimus and mycophenolate mofetil. Following the recommendations he was fully vaccinated for COVID-19. Despite this, one month after the last vaccine, he presented to our emergency department with dyspnea, prostration, fatigue and respiratory insufficiency. A bilateral pneumonia caused by SARS-CoV-2 was verified, and he was hospitalized in the COVID-19 primary intensive respiratory center where high flow oxygen therapy was immediately initiated. The treatment was further complicated by secondary pneumonias, extending the duration of his hospital stay. Finally, after two months of hospital treatment the patient was discharged home.

The treatment of immunosuppressed heart transplant recipients for COVID-19 is an extraordinary clinical challenge, requiring an uneasy act of balance between a deadly infection and a potentially equally fatal heart transplant rejection.¹

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LITERATURE

1. Vaidya G, Czer LSC, Kobashigawa J, Kittleson M, Patel J, Chang D, et al. Successful Treatment of Severe COVID-19 Pneumonia With Clazakizumab in a Heart Transplant Recipient: A Case Report. *Transplant Proc.* 2020 Nov;52(9):2711-2714. <https://doi.org/10.1016/j.transproceed.2020.06.003>