RECOMBINANT HUMAN MONOCLONAL ANTIBODIES CASIRIVIMAB/IMDEVIMAB USE IN INHIBITION OF THE SARS-CoV-2 VIRUS INFECTION

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Abstract

Introduction: The spread of the SARS-CoV-2 virus has caused severe problems for healthcare facilities and infrastructure worldwide. The development of rapid diagnostic tools, effective treatment protocols, and vaccines against the pathogen has accelerated. This work aims to elucidate the benefits of recombinant human monoclonal antibodies to slow the progression of SARS-CoV-2 variant B.1.617.2 infection (delta variant). Material and methods: This is a retrospective analysis with a 6-month follow-up involving all patients who received recombinant human monoclonal antibodies (MABs) casirivimab/ imdevimab at University Hospital Martin in November and December of 2021. Results: A total of 180 patients were enrolled in the cohort with a mean time to administration of symptoms were 6,01 +/-0,3 days in the group of vaccinated patients and 5,52+/-0,28 days in the group of non-vaccinated patients and a mean time to the resolution of symptoms were 4,37 +/-0,62 days in the group of vaccinated patients and 3,83 +/-0,3 days in the group with non-vaccinated patients. Of these patients, 13 developed bronchopneumonia (7,2%)—serious side effects after MAB administration were observed in 1 patient. Conclusion: Using recombinant human monoclonal antibodies casirivimab/ imdevimab to slow or to stop SARS-CoV-2 variant infection B.1.617.2 significantly affected the course of the disease. Quick diagnostics, identification of at-risk patients, and multidisciplinary collaboration are essential in COVID-19 management.

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