



SAFETY OF REMDESIVIR IN PATIENTS WITH ACUTE RENAL FAILURE IN THE CONTEXT OF COVID-19

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Background:

Acute renal failure (ARF) as part of SARS-CoV-2 infection occurs due to the renal tropism of the virus. It is considered that virus impairs renal function directly, by active replication in the epithelial cells of the renal tubules and indirectly, by cytokine-induced injury. Older-aged patients, comorbidities and immunosuppressants favor the development of ARF. Remdesivir is used as a therapy for the treatment of mild to moderately severe forms of coronavirus disease 2019 (COVID-19), especially in immunocompromised patients. The use of remdesivir is not recommended in the case of: multiorgan failure and/or shock, tenfold elevated liver enzymes, chronic dialysis and creatinine clearance less than



30 ml/min. We present the case of an immunocompromised patient with a severe form of COVID-19 complicated by ARF. Despite ARF, remdesivir was administered with a favorable clinical outcome.

Conclusion:

Life-threatening COVID-19 was treated with remdesivir in a severely immunosuppressed patient. Despite severe impairment of renal function, remdesivir treatment was uneventful. After the cure of COVID-19, the renal function fully recovered.

Case:

An 80-year-old patient was hospitalized due to the progression of previously diagnosed chronic lymphocytic leukemia (CLL). CLL progression manifested as lymphocytosis, enlarged spleen and lymph nodes. Treatment with rituximab and chlorambucil was started. Hospitalization was complicated by SARS-CV-2 infection. Deterioration of lung function with severe respiratory failure developed. Computed tomography (CT) pulmonary angiogram showed interstitial ground glass infiltrates of both lungs along with filling defects of segmental pulmonary arteries. Patient also developed ARF (creatinine clearance <30 ml/min). An abdominal CT showed slightly dilated ductal systems of both kidneys and hypovascular areas in the spleen (infarct zones). Remdesivir was introduced into the therapy along with casirivimab / imdevimab and convalescent plasma. Complete recovery of respiratory function, resolution of pulmonary infiltrates, and recovery of renal function occurred. The patient was discharged home after 3 weeks of hospital treatment.