Review article UDC: 616.98:578.834:616.155.194

doi: 10.5633/amm.2022.0308

TODAY'S CHALLENGES - TREATMENT OF ANEMIA IN PATIENTS WITH RENAL FAILURE IN COVID-19 CIRCUMSTANCES

Branka Mitić^{1,2}, Zorica Dimitrijević^{1,2}, Radmila Veličković Radovanović^{1,2}

¹University of Niš, Faculty of Medicine, Niš, Serbia ²University Clinical Center Niš, Clinic of Nephrology, Niš, Serbia

Contact: Branka Mitić

48 Dr Zoran Djindjić Blvd., 18000 Niš, Serbia

E-mail: miticdrbranka@gmail.com

A high rate of severe anemia wasobserved in patients with acute kidney injury (AKI) and also in patients on dialysis or chronic kidney disease (CKD) who contracted anew infectious disease caused by SARS-CoV-2. The most severe anemia in COVID-19 occurs in people with severe systemic inflammation, which may occur during illness. Recent studies showed that elevated concentrations of D-dimer are associated with lower hemoglobin and higher serum ferritin. A controversial aspect of therapy in patients with kidney diseases and COVID-19 infection is observed in both populations (with AKI or CKD) about the use of erythropoiesis-stimulating agents (ESA) for the treatment of anemia.

Erythropoiesis stimulating agents represent a revolution in the treatment of anemia in patients with kidney disease. But, he combined interaction of the inflammatory and immune systems with the coagulation system is extremely pronounced in patients with COVID-19 infection. The question is how to treat anemia in patients with COVID-19, whether ESAs are potentially harmful or beneficial, what encourages us to continue the treatment of anemia in patients with COVID-19 usingESA and what are the possibilities to reduce or exceed the risks, as well as whether this therapeutic approach is a new challenge in the treatment of Covid-19 infection.

Acta Medica Medianae 2022;61(3):54-59.

Key words: kidney disease, anemia, Covid-19