

CORRECTION OF ANEMIA IN PATIENTS WITH CHRONIC KIDNEY DISEASE ON HEMODIALYSIS

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Introduction. The kidneys are the main source of erythropoietin, a hormone that stimulates red blood cell production. In chronic kidney disease, there is a deficiency of this hormone, which leads to low production of red blood cells, resulting in the development of anemia. In turn, hemoglobin deficiency in the blood is manifested in disorders of many systems and organs, because they do not receive enough oxygen. Anemia of chronic kidney disease, is a form of normocytic, normochromic, hypoproliferative anemia with no leukopenia or thrombocytopenia. This is a frequent complication and contributes considerably to reduced quality of life of patients with chronic kidney disease. It is frequently associated with poor outcomes in chronic kidney disease and confers an increased mortality risk.

Aim. To analyze and study drugs for the treatment of anemia in patients with chronic kidney disease on hemodialysis.

Materials and methods. We analyzed the articles, adapted evidence-based clinical guidelines, drug instructions, and a unified clinical protocol that provides medical care to hemodialysis patients with anemia.

Results and discussion. The treatment of anemia associated with chronic kidney disease is based on iron administration and erythropoietin drugs. Recormon contains an active substance – epoetin beta, obtained by genetic engineering, in its amino acid and carbohydrate composition is identical to erythropoietin excreted from the urine of patients with anemia. The biological efficacy of epoetin beta has been demonstrated after intravenous and subcutaneous administration. Recormon increases the number of erythrocytes, reticulocytes and hemoglobin levels, as well as the rate of incorporation of ^{59}Fe into cells, specifically stimulates erythropoiesis. It does not affect leukopoiesis and has no cytotoxic effect on bone marrow. In patients on hemodialysis, the drug is administered within 2 minutes through an arteriovenous shunt at the end of the dialysis session.

Conclusion. Thus, we analyzed and studied the necessary drugs for the correction and treatment of anemia, so Recormon is highly effective among other erythropoietin drugs and does not cause cytotoxic effects on the human body. Recormon can correct and treat anemia in patients with chronic renal failure who require vital hemodialysis.