

MIXED CRYOGLOBULINEMIA SYNDROME: FEATURES OF THE CLINICAL COURSE AND TREATMENT. LITERATURE REVIEW AND DESCRIPTION OF A CLINICAL CASE ASSOCIATED WITH COVID-19

V. V. Tsaryk

Bogomolets National Medical University, Kyiv, Ukraine

Abstract. *The aim of the study* was to analyze the literature review regarding modern methods of diagnosis and treatment of mixed cryoglobulinemia. Mixed cryoglobulinemia syndrome (MCS) is a unique systemic inflammatory syndrome, which includes small- and medium-sized vessel vasculitis caused by cryoglobulin-containing immune complexes. MCS is potentially caused by hepatitis C virus infection. It may also be associated with autoimmune or lymphoproliferative disorders or, rarely, may be idiopathic. The diagnosis of MCS should be suspected in any patient who presents with one or more of the following clinical features: palpable purpura, skin ulcers, arthralgias and/or arthritis, peripheral neuropathy, and/or microscopic hematuria or proteinuria with or without chronic kidney disease. The general approach of management of moderate to severe mixed cryoglobulinemia should include targeted treatment of the underlying disease causing the cryoglobulinemia along or with additional immunosuppressive therapy. In some cases, immunosuppressive therapy is started first, and then, after stabilization of disease, therapy for the underlying disease is added. The main indication for immunosuppressive therapy is a progressive systemic disease of the kidneys, nervous system, gastrointestinal tract, skin, or vasculitis with necrosis. The prognosis is variable and depends on the severity of the disease and the response of the underlying disease to therapy.

In this publication, we also describe a rare clinical case of mixed cryoglobulinemia associated with COVID-19. Thus, the syndrome of cryoglobulinemia is quite difficult both in diagnosis, taking into account the heterogeneity of clinical and laboratory data, and in treatment which makes it necessary to select effective immunosuppressive therapy in specific clinical cases.

Key words: cryoglobulinemia, mixed cryoglobulinemia, immunosuppressive therapy, rituximab, COVID-19.
