

Evolution of HCV-Associated Cryoglobulinemic Vasculitis after Treatment with Direct-Acting Antivirals

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Abstract

Background: Circulating cryoglobulins are detected in 40-60% of patients with HCV chronic infection, and cryoglobulinemic vasculitis is observed in 15% of cases.

Methods: We included 24 patients with HCV-related mixed cryoglobulinemia (MC) and 8 patients with asymptomatic HCV cryoglobulinemia, between 2016-2019. All patients received DAA therapy: 22 patients with ombitasvir/paritaprevir/ritonavir and dasabuvir and 10 patients with ledipasvir/sofosbuvir. The primary endpoint was complete clinical remission of vasculitis at week 24.

Results: All 5 patients with renal involvement received immunosuppressive therapy; complete clinical remission occurred in 3 of these cases. SVR was achieved in 91.6% of patients with vasculitis, compared to 100% in the asymptomatic group ($p=0.01$). Purpura, myalgia, arthralgia and muscular weakness resolved in 91.6% of patients after SVR. Neurological symptoms improved in 75% of cases. All immunological parameters improved after therapy. Circulating cryoglobulins became undetectable in 54.2% of patients with vasculitis and in 62.4% of the asymptomatic group. The predictive factors for clinical and immunological response were: level of fibrosis, cryocrit and C4 levels, rheumatoid factor activity, and BVASv3.

Conclusions: Direct antiviral therapy generates a virological response of over 95% in patients with HCV cryoglobulinemic vasculitis, and is associated with increased rates of complete clinical response and moderate immunological response.

Key words: cryoglobulins, vasculitis, hepatitis C virus, direct-acting antivirals