





## CRYOGLOBULINEMIC VASCULITIS ASSOCIATED WITH HEPATITIS C WITH TRANSITORY CENTRAL NERVOUS SYSTEM INVOLVEMENT: A CASE REPORT

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## **BACKGROUND**

Cryoglobulinemic vasculitis (CryoVas) is a small vessels vasculitis characterized by immunoglobulins that precipitate reversibly in low temperatures. The most affected areas are the skin, joints, peripheral nerves and kidneys. According to Brouet classification, there are three types of cryoglobulinemia. The types 2 and 3 are associated with hepatitis C, a disease present in 130-170 million people worldwide. At least one third of patients with hepatitis C have an extrahepatic manifestation, and the CryoVas is the most common one. The central nervous system (CNS) manifestation in CryoVas associated with hepatitis C is particularly rare, occurring in less than 10% of the cases, often ischemic manifestation (stroke or transient ischemic attacks).

## **CASE REPORT**

A 57 years old white woman, previously with arterial hypertension and hepatitis C (diagnosed 2 years ago), searched for medical care due to diplopia for 4 days ago. She also had intense fatigue, paresthesia in inferior limbs and palpable purpura in limbs and trunk for 6 months ago. The physical examination showed high levels of blood pressure (180/100mmHg), synovitis in the wrists, metacarpophalangeal joints and ankles, edema in lower limbs and palpable purpura in upper and lower limbs, abdomen and back. Laboratory exams revealed normochromic and normocytic anemia, rheumatoid factor 1:640 (reference: until 1:80), hypocomplementemia (low C3 and C4), proteinuria of 1130mg in 24-hour and the presence of cryoglobulins in the qualitative analyses. The magnetic resonance imaging of the brain was normal. The serum creatinine was normal at baseline and increased to 1,65mg/dL after five days. She was submitted to a kidney biopsy that revealed diffuse proliferative glomerulonephritis, membranoproliferative pattern, with focal intracapillary hyaline deposits. She was treated with 12mg of oral ivermectin, three days of intravenous methylprednisolone, at the dose of 1 gram, followed by oral prednisone at the dose of 1mg/kg, and finally 1 gram of intravenous rituximab at day one and day fifteen. Almost all of symptoms were solved. The levels of serum creatinine were normalized, the palpable purpura disappeared and only the paresthesia in the distal phalanges of the right inferior limbs was kept. The diplopia was solved by itself before the therapy with steroids.

## **CONCLUSION**

This report describes a case of CryoVas associated with hepatitis C, with transitory involvement of CNS. The plasmapheresis wasn't needed in this case because of the mild and limited nature of renal and CNS involvement.