

NEUROLOGICAL MANIFESTATIONS IN CRYOGLOBULINEMIA

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DEFINITION

- Cryoglobulins are immunoglobulins that persist in the serum, precipitate at cold temperature and resolubilize when rewarmed

TYPES

- Type I is often associated with hematological disorders.
- Type II and III are mixed cryoglobulins, composed of different immunoglobulins with a monoclonal component in type II and only polyclonal immunoglobulins in type III.
- Mixed cryoglobulins are associated with connective tissues or infectious diseases
- *Hepatitis C virus is involved in most of "essential" mixed cryoglobulinemia*

CLINICAL PICTURE

- Dermatological, rheumatological, and nephrological manifestations are the most frequent, and neurological complications are found in 20 percent of cases.
- However, in mixed cryoglobulinemia with low cryoglobulins level, neurological signs may reveal the disease.
- Sensory, axonal, peripheral neuropathies or sensory and motor multiple mononeuropathies are frequent
- Ischemic central nervous system complications are rare

PROGNOSIS AND TREATMENT

- This depend on association with hepatitis C, and presence of vasculitic lesions in the nerve biopsy.

CASE STUDY

- We describe a 48 year old man with chronic HCV infection, cryoglobulinemia, sensory and motor peripheral neuropathy. The diagnosis of multineuropathy was confirmed by clinical examination and EMG. A nerve biopsy revealed an inflammatory infiltrate in the perineural space and signs of demyelination and axonal degeneration
- The patient had no improvement of neurological symptoms with use of analgesics and immunomodulators
- When he was treated with interferon alpha (3 million units S.C, 3 times per week) and ribavirin (500 mg orally, twice a day) for 48 weeks, **Magic response occurred**

THANK YOU