

# Analysis of antiphospholipid antibodies and cystatin C in multiple sclerosis patients [Análisis de anticuerpos antifosfolipídicos y cistatina C en pacientes con esclerosis múltiple]

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Cystatin C is considered the most important physiological inhibitor of endogenous cysteine proteases; the role of cystatin C is believed to be to modulate the activity of proteases secreted or released from damaged cells or in the process of necrosis, therefore cystatins being fundamental regulatory processes and a potential prevention of local proteolytic damage. Antiphospholipid antibodies are used to clarify the diagnosis of diseases like multiple sclerosis (MS) and other pathologies could present similar symptoms or paraclinical findings. The objective of the present work is to analyze the concentration of cystatin C and the presence or absence of antiphospholipid antibodies in patients diagnosed with relapsing remitting multiple sclerosis (RRMS) as markers of demyelization. This work was carried out jointly by the Vascular Risk Laboratory, the Laboratory of Autoimmunity and Multiple Sclerosis Unit, Hospital Universitario Virgen Macarena in Seville in one year. Two types of people were selected: Group 1 (n = 30) RRMS group and a control group, n = 30. Cystatin C and antiphospholipid antibodies IgG and IgM, IgG and IgM anticardiolipin, ?2 glycoprotein IgG and IgM were determined. Patients showed negative titers of antiphospholipid antibodies IgG and IgM, IgG and IgM anticardiolipin, ?2 glycoprotein IgG and IgM. Cystatin C concentration is lower in the group of patients diagnosed with MS, which could give rise to a decrease in the modulation of endogenous cysteine proteases. This would exacerbate the progress of demyelization in MS. © 2013 Federación Bioquímica de la Provincia de Buenos Aires.

Antiphospholipid antibodies

Cerebrospinal fluid

Cystatin C

Cysteine proteases

Demyelization

Multiple sclerosis

Oligoclonal bands