MASP-2: New evaluating parameters

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Introduction. MASP-2 is one of the starters of the lectin pathway, the third complement pathway which components and sequence is now under construction.

Objective: Evaluate the MASp-2 blood-cerebrospinal fluid (CSF) dynamics throughout the behavior of this protein in both compartments and its relation with the flux velocity.

Materials and methods. 56 serum and CSF samples simultaneously taken were studied with or without blood-CSF dysfunction. CSF and serum MASP-2 levels were measured by commercial enzyme-linked 158 immunosorbent assay (ELISA) kit.

Results: A saturation curve-like was obtained when plotting CSF MASP-2 vs. the molecular flux done by its Q albumin values. This empirical results allowed a re-evaluation of the protein characteristics of MASP-2 with a new groups of parameters. Those ones can help to describe its properties since the neuroimmunological point of view according to the capacity to diffuse free or in associated forms in the different blood—CSF barriers. The experimental values mimics the enzymatic kinetic curves and serves to name at least new parameters of this molecule CSF/serum diffusion rate: Kcdw and saturation MASP-2 concentration, 40,96 and 26,78 respectively.

Conclusions: these new parameters can characterize MASP-2 in its diffusion throughout the blood-CSF barrier.

Key words: MASP-2, blood-cerebrospinal fluid, diffusion