

Genetic susceptibility to Andes Hantavirus: Association between severity of disease and HLA alleles in Chilean patients

Susceptibilidad genética a hantavirus Andes: Asociación entre la expresión clínica de la infección y alelos del sistema HLA en paciente

Ferrer C., Pablo

Vial C., Pablo A.

Ferrés G., Marcela

Godoy M., Paula

Cuiza V., Analia

Marco C., Claudia

Castillo H., Constanza

Umaña C., María Elena

Rothhammer E., Francisco

Llop Romero, Elena

Andes hantavirus (ANDV) infection in Chile has a variable clinical expression, and infected individuals may present with different grades of disease severity. This study aimed to determine if clinical expression of ANDV infection in Chilean patients is associated with the HLA system. HLA alleles A, B, DRB1 and DQB1, were studied in two groups of patients with confirmed ANDV infection: 41 patients with a mild disease course (without respiratory failure and cardiovascular shock) and 46 patients with a severe disease course (with respiratory failure and shock). Molecular typing of HLA system was performed by SSP-PCR. The HLA-DRB1*15 allele, was significantly more common in the group of patients with mild disease ($p = 0,007$) and thus for possibly associated with a protective effect against ANDV infection. Conversely, HLA-B*08 was more common in patients with severe disease ($p = 0,06$). Although the association was marginally significant, allele HLA-B*08 may be linked to an increased suscept