

CONTRIBUTIONS TO THE STUDY OF SOME ACUTE PHASE PROTEINS IN CHILDREN WITH MUMPS PAROTITIS

Doinița Ispas*, Florica Topârceanu**, Simona Ersoiu*, Rodica
Hodrea***

*University of Medicine and Pharmacy

**Institute of Virology

***Clinic of Infectious and Tropical Diseases, Bucharest

Ceruloplasmin (Cp) and transferrin (Tr) are two metal-enzymes known as humoral markers of acute phase response. Their seric levels vary during the evolution of an infectious disease. Under normal conditions, Cp contains 95% of the copper bivalent ion, while Tr stores the ferric bivalent ion during the acute inflammation (mainly bacterial). We studied the levels of Cp/Cu²⁺ and , respectively, Tr/Fe²⁺ in sera of 50 children with mumps parotitis (P) and secondary meningitis (M). In 20 children with P, Cp and Cu²⁺ levels were normal in the outbreak of the disease. These levels are decreasing in evolution, under the normal values. Tr varies by a "bell" ascending curve, their maximal values being 1,5-2,5 fold higher than the normal, while Fe²⁺ levels progressively decrease, in opposite with Tr variation. The 30 children with M as a complication of P had significantly increased levels of Cp in the outbreak of the illness, which are decreasing in evolution. Tr has a similar variation in comparison to uncomplicated P, but

it decreases very slowly in evolution. The normal value for Cp was 32 mg% and the normal limits for Tr were 20-150 mg% (as we previously established in 243 healthy children, aged among 0-13 years). Our study shows that Cp and Tr could represent useful markers in controlling the evolution of viral acute infections, as well as of bacterial acute infections.