A clinical case of a no evidence-based medical treatment of cytomegalovirus infection in an infant

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Objective. Cytomegalovirus, which belongs to the herpes viruses' group, is the most frequent cause of congenital infection. The fetus may be silently infected in utero, as a result of initial infection or reactivation of a chronic infection in the mother. This may lead to different failures of the child's organs and systems. The presence of antibodies to cytomegalovirus (CMV) in infants, even without clinical signs of infection, often leads to unreasonable medical treatment.

Methods. The parents of the 2-month-old child appealed to the department to verify the correctness of prescribed treatment. A high level of CMV IgG was detected in maternal blood after pregnancy. That's why congenital CMV infection was suspected in 1-month-old infant. His laboratory tests revealed high level of CMV IgG, but CMV DNA wasn't found by PCR in blood, urine, saliva. Despite this, the baby was diagnosed with congenital CMV infection and was treated with anti-human anticytomegalovirus immunoglobulin (2 doses). However, antibodies titer was at the same level on repeat testing. On physical examination in our department: the condition of the child was satisfactory, cognitive development was normal.

Results. Diagnosis of congenital CMV infection isn't correct, according to negative CMV DNA PCR in blood, saliva, urine and lack of clinical manifestation (microcephaly, jaundice, petechial rash, hepatosplenomegaly, hepatitis, pneumonitis, sensorineural hearing loss, etc.). Therefore, further examination and specific immunoglobulin therapy aren't needed, dynamic observation is recommended. The child's condition remains satisfactory at the age of 4 months, there aren't any complaints from his parents.

Conclusion. The main diagnostic test of congenital CMV infection is PCR of body fluids, which means that serological research should not be used in routine diagnostics. The detection of CMV IgG in clinically healthy infants isn't a criterion for this diagnose and does not require specific treatment.