## INFECȚIA RESPIRATORIE ACUTĂ ASOCIATĂ CU INFECȚIA VIRALĂ PERSISTENTĂ LA COPII

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**Introducere.** La copilul sub 5 ani, morbiditatea în 2/3 de cazuri sunt afecțiunile respiratorii acute, ponderea pneumoniei comunitare (PC) fiind până la 40%. Evoluția severă este determinată adesea cu asocierea infecțiilor persistente, mai frecvent infecția virală cu citomegalovirus (CMV).
**Scopul lucrării.** Determinarea markerilor clinico-imunologici în evoluția PC asociate cu CMV la copii.
**Material și metode.** Studiu – 106 copii cu vîrsta sub 5 ani, cu PC asociată cu infecția virală cu CMV. Examinarea serologică ELISA (anti-CMV IgM, anti-CMV IgG), metoda cantitativă Mancini (IgA, IgM, IgG). Statistica: t-Student.
**Rezultate.** Starea gravă I lot – (35,48±1,4%, ($p<0,05$)), II lot – (27,27±1,3%, ($p<0,01$)), III lot – 12,9%. Tuse seaca – (61,29%), spastică – (45,16%), nocturnă – (58,06%) la copii din I lot. Dispnee I lot – 87,09%, II lot – 50%, III lot – 41,9%. Prezența stridorului I lot – (74,4%), II lot – (35%), III lot – (22,5%). Hipo-Ig A (I lot – 83,33±2,7%, ($p\leq0,05$), II lot – 93,33±3,6%, ($p\leq0,01$), III lot – 74,19±1,9%, ($p\leq0,05$)). Hipo-Ig G (I lot – 72,2±1,6%, ($p\leq0,01$), II lot – 83,3±2,8% ($p<0,05$), III lot – 83,87±2,4% ($p<0,05$)). Hiper-Ig M (I lot – 44,4±1,4% ($p<0,001$), II lot – 43,3±2,7% ($p<0,01$), III lot – 61,29±4,8% ($p<0,05$).
**Concluzii.** (1) Infecția CMV la copii cu PC detremină starea gravă, evoluția mai severă, instalarea insuficienței respiratorii acute și prezența a sindromului bronhoobstructiv sever. (2) Infecția CMV (69%), în studiu dovedește un impact negativ, supresiv asupra sistemul imun umoral dezvoltînd susceptibilitatea la infecții respiratorii frecvente la copii.
**Cuvinte cheie:** pneumonia comunitară, citomegalovirus, copii.

## ACUTE RESPIRATORY INFECTION ASSOCIATED WITH PERSISTENT VIRAL INFECTION IN CHILDREN

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**Introduction.** Acute respiratory illnesses are the cause of morbidity in 2/3 children under 5 years old, of these cases, community acquired pneumonia (CAP) is reported in 40%. Severe and prolonged evolution of acute respiratory diseases is often determined by the association with persistent cytomegalovirus infections (CMV).
**Objective of the study.** Assessment of clinical and immunologic markers in children diagnosed with CAP associated with CMV infection.
**Material and methods.** Our study included 106 children under 5 years old with CAP associated with persistent CMV infection. These children were divided into three study groups: I – control group, II – children with acute respiratory illnesses and persistent CMV infection, III – children with acute respiratory illnesses and persistent remission of CMV infection. Immunological assessment included serological screening with ELISA method (anti-CMV IgM, anti-CMV IgG), Mancini quantitative method (IgA, IgM, IgG). Statistics: t-Student.
**Results.** Severe general appearance was noted in group I in 35.48±1.4% cases ($p<0.05$), in group II in 27.27±1.3% cases ($p<0.01$) and in group III in 12.9%. Dry cough was present in 61.29% children, spastic cough – in 45.16% children and nocturnal cough in 58.06% children from group I. Dyspnoea was characteristic in 87.09% children from group I – 50% from group II, and in 41.9% children from group III. Stridor was reported in 74.4% children from group I 35% children from group II, and 22.5% cases from group III. Hipo-Ig A (group I – 83.33±2.7%, ($p\leq0.05$), group II – 93.33±3.6%, ($p\leq0.01$), group III – 74.19±1.9%, ($p\leq0.05$)). Hipo-Ig G (group I – 72.2±1.6%, ($p\leq0.01$), group II – 83.3±2.8% ($p<0.05$), group III – 83.87±2.4%, ($p<0.05$)). Hiper-Ig M (group I – 44.4±1.4% ($p<0.001$), group II – 43.3±2.7% ($p<0.01$), group III – 61.29±4.8% ($p<0.05$).
**Conclusions.** (1)CMV infection in children with CAP causes severe general appearance, severe progression to acute respiratory failure, increased incidence of severe broncho-obstructive syndrome. (2) High incidence of CMV infection (69%) in our study proves a negative and suppressive impact on the humoral immune system by developing susceptibility to frequent respiratory infections.
**Key words:** community acquired pneumonia, cytomegalovirus, children.