

**Conclusion:** Epidemiological investigations established that the most frequent routes of transmission of viral hepatitis in children included in our study were the parenteral, perinatal and habitual ones. Polymorphic symptoms present in 45% of patients showed difficulties in establishing the clinical diagnosis of viral hepatitis. Both pregnant women and family members of the outbreak had to be investigated not only for HBsAg, but also for the presence of serological markers of hepatitis: anti-HB cor (IgM+ IgG), anti-HCV (IgM+IgG) and anti-HVD (IgM+IgG).

**Key words:** viral hepatitis B, C, D; clinical management; epidemiology; follow-up; diagnosis.

## CORRELATION BETWEEN SERUM IgE AND SEROCONVERSION OF SPECIFIC ANTIBODIES AGAINST ATYPICAL PATHOGENS (*Mycoplasma pneumoniae*, *Chlamydia pneumoniae*) AND RESPIRATORY SYNCYTIAL VIRUS IN PATIENTS WITH BRONCHIAL OBSTRUCTION OF ATOPIC OR INFECTIOUS ETIOLOGY

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**Introduction:** Asthma onset in children is frequently associated with respiratory infections of different etiology: atypical bacteria such as *Chlamydia pneumoniae* (CPN) or *Mycoplasma pneumoniae* (MPN), and/or viruses (Respiratory syncytial virus (RSV), *Rhinovirus*). Recent researches showed that acute viral infection determines a structural susceptibility through inflammatory changes, and may facilitate asthma development in atopic children. However the contribution of each factor to asthma pathogenesis is still controversial.

**Materials and methods:** A case-control study included 129 children hospitalized in the Allergy and Pulmonology wards of the Research Institute for Maternal and Child Healthcare: the first group included 84 children with persistent asthma; the second group included 45 children with bronchial obstruction of infectious etiology. Specific antibodies were assessed using *immunoenzymatic assay* ELISA. *Specific immunoglobulin classes A and G against CPN and MPN and immunoglobulin classes M and G against RSV were evaluated. The total serum immunoglobulin-E (IgE) titres were assessed. Statistical processing of the data was performed using the software Microsoft Excel and STATISTICA 6.0.*

**Results:** The specific antibody seroconversion for the examined infections have been found in both study groups. In the first group of patients hospitalized with asthma exacerbation diagnostic titers of antibodies were detected as follows: against MPN in 8,8% of asthma cases, against CPN in 2,9% and RSV in 11,8% of cases. Antibody response to associated infections was detected for MPN+CPN in 5,9% of children; MPN+VRS in 11,8% of children; CPN+VRS in 2,9%. Estimation of these antibodies presence in the group of children with bronchial obstruction showed the presence of anti-MPN immunoglobulins in 6,6% of cases, anti-CPN immunoglobulins in 4,4% of cases and anti-VRS immunoglobulins in 8,8% of patients. No associated infections were found in this study group. Serum IgE levels were raised from the cut off value in 91,2% of the subjects from the asthma group and in 28,9% from the second group. In addition to that, the serum IgE levels in children with asthma exacerbation was 1,5 folds higher comparing with those serologically negative ( $916,0 \pm 236,0$  IU/ml and  $647,9 \pm 104,6$  IU/ml respectively,  $p > 0,05$ ) and correlated significantly with anti- MPN immunoglobulin G ( $r = 0,58$ ). Also an inverse correlation was found between the serum IgE levels and anti-RSV immunoglobulin M ( $r = -0,53$ ,  $p < 0,01$ ).

**Conclusions:** Infectious factors especially *Mycoplasma pneumoniae* have a direct impact on asthma pathogenesis, allergic sensitization and serum IgE synthesis. *Respiratory syncytial virus* seems to have a

role in the mechanisms of bronchial obstruction onset mostly through the increase of bronchial hyper-reactivity. Thus, the intensity of allergic inflammation in respiratory airways is inversely correlated with the degree of inflammation caused by RSV.

**Key words:** Mycoplasma pneumoniae, Chlamydia pneumoniae, Respiratory syncytial virus, bronchial obstruction, asthma, IgE, atopy, children.

## MULTIPLE PLASMOCYTOMA - A RARE CASE OF THREE ATYPICAL PRESENTATIONS

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**Introduction:** The solitary plasmacytoma represents less than 5% of all plasma cell neoplasms. The multiple plasmacytoma is 20 times rarer than solitary plasmacytoma. Progression to multiple myeloma is common.

**Methods:** Case study

**Results:** We report a very rare case of multiple plasmacytoma developed in the bone and two atypical sites - renal and gastric. The patient was treated with radiotherapy, surgery and chemotherapy. The case is presented due to its rarity.

**Conclusion:** The high risk of a progression towards a multiple myeloma justifies a comprehensive initial assessment and regular monitoring of all plasmacytomas. The management of a patient with multiple plasmacytomas will be determined by the sensitivity and the site of the tumor.

**Key words:** Multiple plasmocytoma, extramedullary plasmocytoma.

## THE USAGE OF L-ORNITHINE - L-ARGININE COMPLEX AS A NEW EFFECTIVE STEP IN TREATMENT OF ACUTE TOXIC HEPATITIS

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Liver damage and toxic hepatitis occur mainly due to excessive alcohol consumption, viral infections, chemicals, and as a consequence of drug adverse effects. The symptoms of toxic hepatitis often go away when exposure to the toxin stops. But toxic hepatitis can permanently damage the liver, leading to irreversible scarring of liver tissue (cirrhosis) and in some cases to liver failure. Thus, there is an ongoing need for finding new substances that can effectively prevent and cure hepatic damage, minimizing adverse effects.

Carbon-tetrachloride is extensively being used as a model substance for producing hepatotoxic effects such as fatty degeneration of liver tissue, fibrosis, hepatocellular death, and carcinogenicity.

L-arginine is classified as a nonessential amino acid, but may be considered essential or semiessential in stressful situations, including periods of growth (e.g., during childhood or pregnancy) or trauma (e.g., liver disease, severe sepsis, wound healing, cancer). In jaundiced rats, L-arginine supplementation demonstrated anabolic and immunostimulatory properties. Anabolic actions were also confirmed in studies of L-arginine supplementation and improved wound healing, as well as healing of bones, burns, GI tract, and tendons.