The researches of the last years show the increasing role of respiratory diseases in children caused by “atypical” pneumotropic agents, such as Mycoplasma pneumoniae, Chlamydophila pneumoniae, viruses etc. The Mycoplasma pneumoniae is a causative agent of infections of lower respiratory tracts in children in 20,0-40,0 %. The pathogenesis of “atypical” pneumonias is notable for intracellular location of causative agent and following immune disturbances. It demands use of antibiotics which can penetrate into cell and set up high intracellular concentrations, and immunomodulators.

Having regard to high actuality of mycoplasmal pneumonia nowadays, the article describes two cases from our practice.

Case №1. Girl L., 7 years old, was admitted to the infectious department of Donetsk Municipal Child Clinical Hospital №5 09.09.2013. She complained of cough, febrile temperature, sore throat, semelincident vomiting on the top of cough, general weakness. During the objective examination the general condition was estimated as moderate, the obsessive dry cough troubled, which intensified in the lying position and after deep breathing. The nasal breathing was moderately forced with no discharge. The intoxication was moderate-grade. There was no signs of the respiratory failure. The mucous membrane of palatopharyngeal archs were hyperemic moderately, there was diffuse hyperemia and «granulosity» of posterior wall of pharynx. The peripheral lymph nodes were fine and movable. During auscultation in the lungs there were harsh breathing, single wheezing, coarse moist rales at both sides. The liver was for 3 cm below costal margin, spleen - for 2 cm. At the department the girl had a fever up to 39,5°C, and nonsteroid antiinflammatory drugs and physical methods of cooling allowed to reduce temperature only for 3- 4 hours. After the ingalation of β2- adrenergic agonist and steroids the signs of respiratory obstruction reserved, but on the left side below the blade angle and on the middle axillary line the crepitation became to examine.

The X-ray study (10.09.2013 г.) showed that the lung pattern on the both sides was intensified, enriched and deformed at the root areas, fuzzy, loop-shaped, against the
background of the moderate airiness reduction. Roots of lungs are low-structural, sinuses were clear.

Having regard to school age of patient, syndrome of respiratory obstruction at the beginning of the disease, frequent inefficient pertussis-like cough, absence of the respiratory failure, high temperature with moderate level of intoxication, the enlargement of liver and spleen, dissociation of clinical and roentgenologic data, lack of cephalosporines effect, roentgenologic features we supposed atypical causative agents of pneumonia. The results of analysis acknowledged our opinion. The polymerase chain reaction (PCR) of the scraping material of the guttur showed the positive result to Mycoplasma pneumoniae DNA.

The feature of this case was that in 3 weeks after patient her mother also had left-side lowerlobal pneumonia. Her PCR also showed the DNA of Mycoplasma pneumoniae.

Case №2. Girl C., 16 years old, was admitted to the infectious department of Donetsk Municipal Child Clinical Hospital №5 04.11.2013 with complaints of cough, febrile temperature, sore throat, moderately forced nasal breathing, general weakness. Before admission she was ill for 10 days. Admission examination showed that general condition was moderate, the obsessive dry cough and tickling in throat troubled the patient. The nasal breathing was moderately forced with no discharge. During auscultation in the lungs there was harsh breathing, fine moist rales and crepitation on the left back side below the blade angle and in the axillary area. The other clinical data were the same as in case 1, except hepato- and splenomegaly and wheezing – this patient didn’t have them.

In spite of therapy by ceftriaxone the child had high temperature, frequent inefficient cough, general weakness, crepitation in lungs. The AzithroSandoz was added to the treatment. On the 2-nd day the patient's condition and appetite became significantly better, the fever disappeared, the cough intensity decreased, the productive component of it appeared. The causative agent of this infection also was confirmed: the DNA of Mycoplasma pneumoniae and antibodies Ig M to it were found. It should be
noted, that in 3 weeks the mother and the younger brother of this patient had the same infection. It shows the high level of contagiousness and the “family” type of this infection.

On the basis of these cases we conclude that:

1. The features of the clinical course of pneumonia caused by Mycoplasma pneumoniae are the syndrome of the respiratory obstruction in the children of school age, frequent inefficient pertussis-like cough, absence of the respiratory failure, high temperature with moderate level of intoxication, the involvement to the process of the liver and spleen, the high level of contagiousness and the “family” type of this infection, dissociation of clinical and roentgenologic data, tendency to the prolonged course of the pneumonia, lack of cephalosporines effect.

2. The roentgenologic features are infiltrative foci with tendency to fusion, segment involvement, loop- and cellshaped focal opacities, fuzziness of edges, slow resorption of inflammatory infiltration.

3. The polymerase chain reaction (PCR) allows to make an etiological verification of the diagnosis, to find out the Mycoplasma pneumoniae at the earliest possible date to choose the rational antibacterial therapy and to assess the efficacy of the treatment.

4. The treatment of the Mycoplasma pneumoniae should be comprehensive, including antibacterial medicines – new macrolides (AzithroSandoz), probiotics, immunomodulatory and viricide drugs. The duration of antibacterial therapy shouldn’t be less than 2 weeks.

5. For assessment of the efficacy of the treatment not only clinical and roentgenologic data but also PCR results (carry out not until 1 month after the treatment beginning) should be considered