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VEGETATIVE STATUS IN SCHOOL-AGE CHILDREN WITH COMMUNITY-ACQUIRED PNEUMONIA

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Abstract

The results of the first study in Uzbekistan of vegetative disorders and manifestations of asthenic syndrome in school-age children with a diagnosis of "out-of-hospital pneumonia" are presented. 120 children of both sexes took part in the study. The study was an open single-center study.

Keywords

Children, asthenia, pneumonia, vegetative disorders.

INTRODUCTION

In the structure of morbidity, pneumonia occupies one of the leading places, their prevalence is 6–17%. Among all hospitalized children with respiratory pathology, pneumonia accounts for 29–30%. It should be noted that this disease is quite dangerous, has a long course and often causes serious complications followed by a long recovery period [1, 2].

MATERIALS AND METHODS

An important syndrome characteristic of pneumonia is the asthenic syndrome — the most frequent and non-specific pathological condition characterized by a weakening of the energy capabilities of the central nervous system, which largely determines the nature and duration of the recovery period [3, 4]. In addition, the asthenic syndrome and the corresponding neuropsychological stress significantly affect the child's adequate inclusion in educational and work activities after the illness, the quality of life of the schoolchild, his work capacity and socialization [5].

120 children aged 7–14 with a diagnosis of "community-acquired pneumonia" took part in an open single-center clinical study. All children who were included in the study received inpatient treatment on the 2nd–4th day of the disease, at the height of clinical symptoms of community-acquired pneumonia. The general condition of the children during hospitalization could be regarded as medium-severe. Inclusion criteria were: hospital-acquired (non-hospital) pneumonia (CP), which was confirmed radiologically; age from 7 to 14 years; consent of the child and his parents for additional examination. Exclusion criteria are refusal of additional examination; serious concomitant acute and chronic diseases, non-compliance with protocol conditions.

RESULTS AND DISCUSSION













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Table 1. Clinical characteristics of patients at the beginning of the study (n = 120)

Sign	Frequency
Age, years	10.2 ± 1.7
Gender, percentage of boys (n)	45 (54)
Duration of illness, days	$2,7 \pm 1,7$
Fever, % (n)	100 (120)
Tachypnea, % (n)	90 (108)
Skin color:	
— paleness, % (n)	65 (78)
— redness, % (n)	35 (42)
Obstructed nasal breathing, % (n)	45 (54)
Lung sound dulling, % (n)	90 (108)
Crepitation/wheezing, % (n)	40 (48)/60 (72)
Cough, % (n)	100 (120)
Decrease in appetite, % (n)	90 (108)
General weakness, % (n)	100 (120)
Decrease in working capacity, % (n)	100 (120)
Obstructed nasal breathing, % (n)	75 (90)
Lung sound dulling, % (n)	80 (96)
Crepitation/wheezing, % (n)	80 (96)

We determined the degree of severity of autonomic dysfunction with the help of a questionnaire - Wayne's questionnaire, evaluating and comparing the number of points obtained before and after treatment. The observation diaries were filled in by the patients themselves, under the supervision of the doctor and/or parents. The sum of points exceeding 15 indicated the presence of autonomic dysfunction. At the beginning of the study, the total number of points scored during the examination was 30.0 ± 6.4 points in 35% of children, 20.0 ± 1.6 points in 45%, and less than 15 points in 20%. The data we obtained indicate that 77.5% of children had pronounced clinical manifestations of autonomic dysfunction in the early days after pneumonia.

At the same time, according to the results calculated according to Baevsky's formula, it was determined that the majority of children (90%) had a high adaptive potential, which theoretically

















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indicated a sufficient balance of the organism with the environment, due to the available adaptive capabilities. Only 6 children (5%) had moderate functional strain of adaptation mechanisms.

According to the results of Martine's test, 80% of children with pneumonia had an intermediate type of response of the cardiovascular system to physical exertion, 10% had an adverse reaction of the cardiovascular system to physical exertion, and 10% had a normotonic type of reaction of the circulatory system. circulation for physical activity.

CONCLUSION

All children with community-acquired pneumonia have intoxication and asthenic syndromes, manifested by such symptoms as fever, general weakness, reduced work capacity, sleep disturbances, headache, emotional lability, decreased appetite. Most of the children showed signs of autonomic dysfunction, an unsatisfactory response to the orthostatic test, low values of the Stange test, a mild level of depression, and a decrease in concentration. This was accompanied by a deficiency of trace elements in blood serum, low levels of secretory IgA in saliva, and changes in the EEG.

Identified functional disorders and changes require targeted correction during the recovery period of the underlying disease.

REFERENCES

- 1. Antipkin Yu.G. Reference book on children's pulmonology: a doctor's guide / Yu.G. Antipkin, V.F. Lapshin, T.R. Umanets — K., 2011. — P. 49-118.
- 2. Galiyash N.B. General non-specific adaptive reactions in children with acute pneumonia / N.B. Galiyash // Bulletin of Scientific Research. — 2010. — No. 1. — P. 7-9.
- 3. Lembryk I.S. Peculiarities of the asthenic syndrome in chronic somatic diseases in the conditions of educational activities / I.S. Lembryk // Health of the child. — 2019. — No. 1. — P. 52-56.
- 4. Tatum W.O. Handbook of EEG Interpretation / W.O. Tatum. NY: Demos Medical Publishing, 2017. — 300 p.
- 5. Secretary L.B. Increasing local protection in the prevention of acute respiratory diseases in children / L.B. Secretary // Experimental and clinical physiology and biochemistry. — 2013. — No. 3. — P. 89-93.