



International Congress on Biological, Physical And Chemical Studies

International Congress on Biological, Physical And Chemical Studies - is an international conference platform under open access policy. The conference is led by international expert members who take an objective approach to peer review, ensuring each research paper is reviewed, edited by authors and evaluated on its own scholarly merits and research integration. Publishing and joining on the proceeding of the International Congress on Biological, Physical And Chemical Studies will ensure publishing experience and indexing possibilities on various global indexing.

Clinical Features of Phenotypic Signs of Connective Tissue Dysplasia in Children with Community-Acquired Pneumonia

Atabaeva, O. F., Akhmedova, N. R.

Tashkent State Medical University

Relevance. Connective tissue dysplasia (CTD) is a group of genetically determined disorders that result from abnormal synthesis of connective tissue structural proteins such as collagen, elastin, and fibril. In pediatric practice, CTD is a multisystem pathology with a diverse clinical picture, often disguised as functional abnormalities, which complicates early diagnosis. Phenotypic features, especially in children, are key in establishing a preliminary diagnosis, since it is in childhood that most clinical manifestations are subclinical or latent.

Purpose of the study. To identify the frequency of phenotypic manifestations of connective tissue dysplasia in children with community-acquired pneumonia (CAP).

Material and methods. A total of 20 children aged 11 months to 11 years with CAP secondary to CTD were examined. They were admitted to the Pulmonology Department of the Republican Specialized Scientific and Practical Medical Center of Pediatrics. All subjects underwent clinical, anamnestic, instrumental, and laboratory tests. Biochemical studies, including the determination of deoxypyridinoline and hydroxyproline, were conducted using ELISA at the Via Med Clinical, Genetic, and Vaccination Center. Statistical analysis of the obtained data was performed on a personal computer using the Statistica 6 software package.

Results. Analysis of studies conducted in children with CP revealed a high frequency of phenotypic signs of CTD. The most common changes in the musculoskeletal system and chest included: funnel chest deformity - in 13 children (65%), grade 1 scoliosis - in 4 children (20%), flaccid posture - in 2 children (10%), and carinate chest - in 1 child (0.5%). In terms of the musculoskeletal system, the following changes were identified: moderate joint hypermobility and joint crunching (20%), crunching in the temporomandibular joint (0.5%), flat feet (15%), and arachnodactyly (0.5%). Among the developmental defects of the dental and maxillary system in children, the following were observed: abnormal tooth eruption (3 children, 15%), malocclusion (3 children, 15%), and dental caries (9 children, 45%). Visceral manifestations of CTD included hernias of various locations (10%), accessory cardiac chord (10%), biliary dyskinesia (10%), and autonomic dysfunction (15%). Respiratory diseases such as recurrent infections (60%), bronchiectasis (15%), and chronic obstructive pulmonary disease (15%) were observed. 3 children (15%) suffered from visual impairment in the form of myopia. The results of biochemical studies showed an increase in the levels of hydroxyproline and deoxypyridinoline in 12 children (60%), which indicates a disruption of collagen metabolism and the activation of its breakdown processes

in connective tissue.

Conclusion. Most children with CP exhibit various clinical, phenotypic and biochemical signs of CTD, which indicates its significant role in the formation of a predisposition to a protracted and complicated course.