Genchi) 19.5±1.09 sec in 1st group while in 2nd group was 32,8±1.88 sec for test Stange and 19.26±1.36 sec for test Genchi, however were less than in 3rd group which was on inspiration 38,95±1.51 sec and on exhalation 28.73±1.30 sec. In children with AOB and, to a lesser extent, with non-obstructive bronchitis, a noticeable decrease in the Stange and Genchi tests was noted. Level of evidence was statistically significant (P <0.05).

Thus, a regular physical activity in children and adolescents promotes health and fitness. Smoking cessation of parents should always be recommended. Clinical manifestations of acute obstructive bronchitis are more pronounced than in acute bronchitis without obstruction. The functionality of the cardiovascular system decreases in acute obstructive bronchitis.

Mazur O.O.

THE ROLE OF MICROBIAL ASSOCIATIONS IN CHRONIC PURULENT RHINOSINUSITISIN PATIENTS FOR TYPE 1 DIABETES MELLITUS

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The aim of the study was to determine the species and population composition of the microbiota of chronic purulent maxillary rhinosinusitis in patients with type 1 diabetes mellitus of moderate severity, type 1 diabetes mellitus (DM) and 10 patients with chronic purulent rhinosinusitis (CPRS) of the same age without concomitant pathology.

Bacteriological and mycological methods were used to study the species, population level, quantitative characteristics of the microbiota and associates of the maxillary sinus biotope in 38 patients with CPRS and type 1 diabetes mellitus (DM) and 10 patients without CPRS of the same age pathology.

In patients with CPRS, combined with type 1 diabetes mellitus of a moderate severity, bacteria of the genus Bifidobacterium and Lactobacillus, as well as bacteria of the genus Streptococcus (S.salivarius, S.sanguis, S.mitis, L.lactis), Corynebacterium were determined. Against this background, the contents of the maxillary sinus cavity are contaminated with pathogenic and opportunistic bacteria of the genus Prevotella, Fusobacterium, Streptococcus (S.pneumoniae, S.pyogenes, S.viridans), Staphylococcus (S.aurens, S.epidermidis), H.influenzae catarrhalis, E.coli and yeast fungi of the genus Candida. Such changes have led to disturbances of the dominance of indigenous obligate bacteria in the microbiocenosis.

CPRS in patients with type 1 diabetes disturbs microbial associations. In patients with CPRS, the number of associations consisting of 3 species increases 2.7 times, but the number of associations consisting of 4 species of microorganisms decreases 1.4 times. The number of associations consisting of 5 species in patients decreases by 3.5 times.

Among the most numerous associations consisting of 3 species of pathogenic and opportunistic autochthonous facultative microorganisms, the associations of the following representatives are more common: M.catarrhalis, S.aureus and Bacteroides spp.; Prevotella spp., S.viridans and S.salivarius; M.catarrhalis, Prevotella spp. and S.epidermitis; H.influenzae, Prevotella spp. and S.epidermitis. Associations consisting of 4 species were found in 34% of patients and consist of S.pneumoniae, M.catarrhalis, S.pyogenes, Fusobacterium spp; S.pneumoniae, E.coli, S.aureus and Candida spp.; S.pneumoniae, E.coli Hly+, S.viridans and Candida spp.

The dominant pathogens of chronic inflammatory process in the maxillary sinuses are S.pneumoniae, H.influenzae, M.catarrhalis. Other bacteria (S.pyogenes, S.aureus, E.coli Hly+, B.fragilis) are additional or accidental (E.coli Hly+, B.fragilis) pathogens. All leading pathogens persist in the habitat in the association.

In patients with CPRS, combined with type 1 diabetes mellitus of a moderate severity in the contents of the maxillary sinus cavity, the imbalance of autochthonous obligate, facultative and allochthonous microorganisms is formed due to the elimination or formation of a pronounced deficiency of autochthonous obligates, genus Balibacterus sanguis, S.mitis, S.mutans, L.lactis, etc.) and a significant increase in the number and dominant role of pathogenic and opportunistic

S.pneumoniae, Bacteroides spp., S.epidermidis, M.catarrhalis, H.influenzae, Prevotella spp., S.viridans, S.pyogenes, S.aureus and others.

Therefore, the severity of type 1 diabetes in patients with CPRS negatively affects the species composition, population level, qualitative and quantitative dominance of autochthonous obligate and facultative, as well as allochthonous for the habitat of microorganisms and their associations. The above may indicate the influence of not only the etiological agent, but also a certain association of microorganisms on the severity of CPRS with type 1 diabetes mellitus, which must be taken into account when choosing etiotropic treatment.

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FEATURES OF DIAGNOSIS AND TREATMENT OF ATYPICAL RESPIRATORY DISEASES IN CHILDREN

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Respiratory infections occupy a leading place in the structure of morbidity in children of early age around the world. At an early age, there is a functional immunodeficiency condition, which is called immunodeficiency maturation. The proportion of acute respiratory viral infections (ARI) is 65% of all registered diseases. SARS is commonly developed against the background of various pathological states, among which functional disorders of the digestive system are the most common.

An urgent problem is a significant violation of functional disorders in SARS, which is manifested by the deterioration of the processes of secretion and absorption.

The work aims to optimize the treatment of SARS in children with functional disorders of the digestive tract.

According to the data of the pediatric department of the City clinical hospital, 616 children were treated for SARS in 2019. Among patients of an early age group, constipation made up 24.5%, intestinal colic - 22.9%, tendency to loose stools - 19.4%, vomiting - 16.3%. Macroscopically in the stool of 32.0% of children mucus and undigested food remains were observed. The patients with digestive system disorders required a gentle approach to the treatment of SARS. The use of drugs of natural origin that stimulate local factors of immune protection was more preferable. The main effect is to increase the production of interferon and lysozyme, and also to promote the production of immunoglobulins.

Patients were divided into two groups according to the tactics of therapy. In 319 patients the inducers of interferonogenesis - proteflazidum in combination with laferon intramuscularly and/or endonasal were used. In 297 children the treatment with isoprinosine orally started in the outpatient phase, was continued.

Clinical criteria for the effectiveness of therapy were the reduction of intoxication, decrease, and normalization of temperature, reduction of hospitalization period. In both groups, there was no significant difference in the duration of symptoms of patients' intoxication, catarrhal manifestations, or complications of SARS (ear inflammation, bronchitis, acute stenotic laryngitis). In the first group complications of SARS occurred in 19.2% of patients, in the second group, respectively - 20.8%. Instead, in the group of children receiving isoprinosine drugs orally, the period of hospitalization was longer by 2 days and made up 9.04 ± 0.6 days due to the development of gastrointestinal side effects, manifested by diarrhea, flatulence, or vomiting on the provoked premorbid condition.

Thus, a gentle approach to the treatment of SARS in children with functional disorders of the digestive system demonstrated high efficiency, especially in children in the first year of life. A combination of proteflazidum in combination with laferon may be suggested as an optimal approach to the treatment of SARS in children with functional disorders.