## НАЦІОНАЛЬНА АКАДЕМІЯ МЕДИЧНИХ НАУК УКРАЇНИ ДУ «НАЦІОНАЛЬНИЙ ІНСТИТУТ ТЕРАПІЇ ІМЕНІ Л.Т.МАЛОЇ НАМН УКРАЇНИ» ДУ «ІНСТИТУТ МЕДИЧНОЇ РАДІОЛОГІЇ ІМ. С.П. ГРИГОР'ЄВА НАМН УКРАЇНИ» ГРОМАДСЬКА ОРГАНІЗАЦІЯ «МОЛОДІ ВЧЕНІ ТА СПЕЦІАЛІСТИ ІНСТИТУТІВ НАМН УКРАЇНИ М. ХАРКОВА»

ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ КАФЕДРА ВНУТРІШНЬОЇ МЕДИЦИНИ №1 КАФЕДРА КЛІНІЧНОЇ ФАРМАКОЛОГІЇ ТА ВНУТРІШНЬОЇ МЕДИЦИНИ

МАТЕРІАЛИ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ МОЛОДИХ ВЧЕНИХ ЗА УЧАСТЮ МІЖНАРОДНИХ СПЕЦІАЛІСТІВ ПРИСВЯЧЕНОЇ ДНЮ НАУКИ

## «ДОСЯГНЕННЯ ПРОФІЛАКТИЧНОЇ МЕДИЦИНИ ЯК ОСНОВА ЗБЕРЕЖЕННЯ ЗДОРОВ`Я І БЛАГОПОЛУЧЧЯ»

23 травня 2019 року

## THE CONTENTS OF VITAMIN D AND ANTIMICROBIAL PEPTIDES WITH ACUTE INFLAMMATORY BACTERIAL DISEASES OF THE BRONCHOPULMONARY SYSTEM IN CHILDREN OF EARLY AGE

## Kraynya H.V.

Zaporizhzhia State Medical University, Zaporizhzhia, Ukraine

**The purpose**: to determine the content of vitamin D and antimicrobial peptides in blood serum with acute inflammatory bacterial diseases of a bronchopulmonary system in children of early age.

Under observation there were 67 patients aged from 1 month up to 3 years (average age of 1,6±0,1 years), with acute inflammatory bacterial diseases among which there are 46 children with acute bacterial bronchitis and 21 children with an acute pneumonia. Verification of the diagnosis was carried out by means of laboratory and instrumental methods of a research, agrees acting with clinical protocols. Determination of content of vitamin D, a cathelecidin and β1-defensins in blood serum was carried out with use of the commercial OSTEIA 25-HydroxyVitamin D and LL37 sets (Human, ELISA) and Defensin Beta 1 (Elisa) respectively. The group of control was made by 17 children representative on age. Statistical data were presented in the form of Me (Q25; Q75) taking into account distribution which differed from normal. Reliability estimated with the help Mann-Whitney's U-criterion for independent selections.

**Results of a research**. By results of a research reliable decrease in content in blood serum of children of group research of vitamin D in comparison with control group was established (82,0(58,0;74,0) nmol/ml against 100,0(90,0;120,0) nmol/ml respectively, p <0,05). The maintenance of a cathelecidin in blood serum was reliable below in relation to values of control group (0,08(0,05;0,10) ng/ml against 0,20(0,20;0,30) ng/ml respectively p <0,01). The tendency to decrease in contents  $\beta$ 1-defensins in blood serum of children of group research - 85(56;130) pg/ml and 90(78;160) pg/ml in group of control is established (p<0,05). Interrelation of influence of vitamin D on products of antimicrobic peptides it was confirmed with existence of authentically significant direct correlation dependence between vitamin D content in blood serum and the level of antimicrobic peptides (r = 0,9, p <0,01 and r = 0,7, p <0,05, respectively).

Conclusions. Development of acute inflammatory bacterial diseases of a bronchopulmonary system in children of early age happens against the background of deficiency of vitamin D which occupies an important role in thin balance between protective immunity and an immunopathology. The imbalance in the system of synthesis of antimicrobic peptides associated with insufficiency of vitamin D leads to decrease in immunoreactivity of an epithelium of respiratory tracts that in turn leads to massive colonization by bacterial pathogens.

THE INTENSITY IN THE PATHOGENESIS OF THE MUTUAL BURDEN OF NON-ALCOHOLIC FATTY LIVER DISEASE AND CHRONIC KIDNEY	
DISEASE WITH OBESITY	
Antoniy A. A.	73
ENDOTHELIAL LIPASE IN DIAGNOSTIC OF NON-ALCOHOLIC FATTY	15
LIVER DISEASE WITH HYPERTENSION	
Bashkirova A., Lapshyna K.	74
PATHOGENETIC ROLE OF NITROTYROSINE IN DEVELOPMENT DIABETIC	
MYOPATHY IN CHILDREN.	
Chudova N.I.	75
THE EFFECT OF TAKING NITRO-CONTAINING DRUGS HAS AN EFFECT	
ON THE EFFECTIVENESS OF TREATMENT OF GASTROESOPHAGEAL	
REFLUX DISEASE IN PATIENTS WITH STABLE ANGINA OF TENSION	
UNDER CONDITIONS OF COMORBIDITY.	
Drozd V.Yu, Khukhlina O.S., Antoniv A.A.	76
THE EMERGENCE OF NEGATIVE CARDIOVASCULAR EVENTS IN	
PATIENTS WITH STABLE ANGINA PECTORIS AND GASTROESOPHAGEAL	
REFLUX DISEASE DURING ESOPHAGOGASTRODUODENOSCOPY	
Drozd V.Yu, Khukhlina O.S., Antoniv A.A.	77
BISOPROLOL INFLUENCE ON THE ADVERSE OUTCOMES IN PATIENTS WITH	
ACUTE MYOCARDIAL INFARCTION DEPENDING ON THE sST2 LEVEL	
Hilova Y.V., Rodionova J.V., Kutya I.N.	78
CLINICAL DIAGNOSIS OF ACUTE TONSILLOPHARYNGITIS IN CHILDREN	
Horbatiuk I.B., Burdeyna Yu.M.	79
THE CONTENTS OF VITAMIN D AND ANTIMICROBIAL PEPTIDES WITH	
ACUTE INFLAMMATORY BACTERIAL DISEASES OF THE	
BRONCHOPULMONARY SYSTEM IN CHILDREN OF EARLY AGE	
Kraynya H.V.	80
SURGICAL TREATMENT OF POSTTRAUMATIC DEFORMATIONS OF THE	
PROXIMAL FEMUR	
Lisunov M.S., Kozhemiaka M.O., Bohdan O.V.	81
INHIBITORS OF THE RENIN-ANGIOTENSIN SYSTEM IN DIABETIC	
PATIENTS WITH HEART FAILURE WITH PRESERVED EJECTION	
FRACTION TREATMENT: IMPACT OF M235T POLYMORPHISM OF ATG.	
Medentseva O.O., Rudyk I.S., Babichev D.P., Lozyk T.V.	82
THE PECULIARITIES OF THE CORRECTION OF EATING IN PATIENTS	
WITH NON-ALCOHOLIC FATTY LIVER DISEASE DEPENDING ON THE	
POLYMORPHISMS OF THE PPARG2 AND ADRB2 GENES	
Nikiforova Ya.V.	83
ASSOCIATION BETWEEN VASCULAR ENDOTHELIAL GROWTH FACTOR	
LEVEL AND GLYCEMIC CONTROL IN PATIENTS WITH CORONARY	
HEART DISEASE AND TYPE 2 DIABETES MELLITUS	
Ovrakh T.	84
INDICATORS OF NITROSATIVE STRESS IN INFANTS WITH ACUTE	
BACTERIAL DISEASES OF RESPIRATORY ORGANS	
Pogribna A.O.	85
DYNAMIC PARAMETERS OF NONSPECIFIC HYPERSUSCEPTIBILITY OF	
THE BRONCHI IN TEENAGERS WITH BRONCHIAL ASTHMA	86
Shakhova O.O.	