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Чепурна М. Н., Бабич Є. М.
THE ROLE OF PROBIOTICS IN HUMAN MICROECOLOGY
Chepur'nya M. N., Babich E. M.

Today the number of violations in dysbiotic microflora of the gastrointestinal tract increases. This is a consequence of many factors: the effect of negative environmental factors, the uncontrolled use of antibiotics, reduced adaptive capacity of the organism, etc.

Probiotic preparations are widely used in the clinical practice to solve the problem of dysbiosis. The properties of probiotics, their impact on the human body and mechanisms of actions of probiotics are presented in the review. The modern requirements for probiotic microorganisms and preparations-probiotics are described in the article.

Key words: intestinal microflora, disbiotyosis, probiotics.

СОДЕРЖАНИЕ БАЗАЛЬНОГО УРОВНЯ ПОЛОВЫХ ГОРМОНОВ И ГОРМОНОВ ГИПОФИЗА В КРОВИ БОЛЬНЫХ ДЕМОДЕКОЗОМ
Бодна Е. И., Ревенко Ж. А.
CONTENTS BASAL LEVELS of SEX HORMONES and PITUITARY HORMONES IN PATIENTS DEMODECOSIS
Bodnya K. I., Revenko Zh. A.

The regularities of changes in the nature and dynamics of clinical – hormonal parameters are revealed in this research that are not being specific they expand knowledge of the pathogenesis of demodicosis and create certain conditions for the directed correction of compensatory and adaptive capabilities of the host and open up prospect for improvement – pathogenetic treatment of demodicosis and its complications.

Keywords: demodecos, sex hormones, pituitary hormones.

ИММУНИТЕТ И ЦЕНТРАЛЬНАЯ НЕРВНАЯ СИСТЕМА (ЦНС) ПРИ ХРОНИЧЕСКОМ ПРИОБРЕТЕННОМ ТОКСОПЛАЗМОЗЕ
Бодня Е. И., Боброва О. В., Конына С. С., Верногора И. И.
IMMUNITY AND CENTRAL NERVOUS SYSTEM (CNS) CHRONIC ACQUIRED TOXOPLASMOSIS
Bodnya K. I., Bobrova O. V., Kotsyna S. S., Vernigora I. I.

When chronic acquired toxoplasmosis (CAT) the regularities of changes in the ratio of the immune system (CD3, IRI, total immunoglobulins) and the functional state of the central nervous system (EEG changes on stem-diencephalic type) available information, which made it possible to evaluate the severity of the flow chart and predict treatment outcome without resorting to complex research methods. Found that the host-parasite relationships and clinical manifestations of chronic toxoplasmosis depend largely on protective and adaptive responses and compensatory capabilities of the human body.

Keywords: toxoplasmos, immune system, clinical manifestations.

ТЕОРИЯ ВЕКТОРНОЙ АЛГЕБРЫ В АНАЛИЗЕ СВОЙСТВ АНТИМИКРОБНЫХ ПРЕПАРАТОВ
Бойко Н. Н., Заец А. И., Осолодченко Т. П.
VECTOR ALGEBRA THEORY IN ANALYSIS OF PROPERTIES OF ANTIBACTERIAL MEDICATIONS
Boyko N. N., Zaytsev A. I., Osолодченко Т. П.

The possibility to use vector algebra theory for quantitative description of antibacterial medications and comparison of their properties has been shown. Mathematic formulas for description of medications’ antibacterial action basing on data of simple to use well method have been presented. This method allows evaluation of medications’ antibacterial activity and opportunity to choose the most active ones, as well as compare them with each other. It is noted that medications of natural origin are inferior to those of synthetic origin as for their antibacterial activity, and new galenic medications possess the most antimicrobial properties. The prospects of this method for pharmacoeconomic analysis of medications conducted in order to chose optimal cost/quality ratio has been demonstrated.

Keywords: vector algebra, antibacterial properties of medications.

ИНФЕКЦИОННАЯ ПАТОЛОГИЯ МАТЕРИ И ЕЕ ВЛИЯНИЕ НА АНТРОПОМЕТРИЧЕСКИЕ ПОКАЗАТЕЛИ НОВОРОЖДЕННЫХ
Марковский В. Д., Сорокина И. В., Миришнейченко М. С., Плетень О. Н.
INFECTIOUS PATHOLOGY OF MOTHER AND ITS INFLUENCE ON THE ANTHROPOMETRIC PARAMETERS OF NEWBORNS
Markovsky V. D., Sorokina I. V., Myroshnychenko M. S., Pileten O. N.

The presence in pregnant woman foci of latent, chronic infection of any localization is an important cause of various complications during pregnancy, childbirth, a wide range of perinatal pathology. The purpose of this study was to reveal the influence of mother infectious diseases on the anthropometric parameters of newborns. The authors set up an experiment on WAG rats on modeling subacute (prolonged) peritonitis in females in order to study the influence of this infectious-inflammatory process in the organism of mother on the anthropometric parameters of newborns. The study found that the presence of infectious-inflammatory diseases in mother is not always leads to inflammatory changes in the placenta, but involutive- degenerative and dyscirculatory changes are taking place in all cases. In newborns from mothers with infectious pathology revealed significantly reduced anthropometric parameters in comparison with newborns from healthy mothers. Anthropometric parameters of newborns from mothers with infectious pathology depend on the infective dose (the higher the dose of agent, the less neonatal anthropometric parameters).

Negative influence of infectious extragenital pathology of mother on newborn anthropometric parameters requires improving the quality of pregravidal training aimed at early detection and sanitization of foci of infection.
Keywords: infection, mother, anthropometric parameters, newborn.

ЕКСПЕРИМЕНТАЛЬНИ РОБОТИ (EXPERIMENTAL STUDY)

ВИВЧЕННЯ БІОЛОГІЧНИХ ВЛАСНОСТЕЙ ПРОБІОТИЧНИХ ШТАМІВ LACTOBACILLUS SPP ПРИ КУЛЬТУРУВАННІ ЇХ В АЕРОБНИХ ТА МІКРОАЕРОФІЛЬНИХ УМОВАХ

Бабич Е. М., Калінченко С. В., Коротюк О. О., Ряжкова Т. А., Скляр Н. І., Маслій І. І., Балак А. К., Шкодовська Н. Ю., Багача М. Б.  

THE STUDY OF THE BIOLOGICAL PROPERTIES OF PROBIOTIC LACTOBACILLUS SPP. STRAINS UNDER AEROBIC AND MICROAEROPHILIC CULTIVATION CONDITIONS


The biological properties (growth characteristics, adhesiveness activity and sensitivity to antimicrobial) of probiotic Lactobacillus strains were studied under different gas composition of incubation atmosphere. It was found that the number of viable lactobacilli cells in the one dose of investigated probiotic preparations was lower than it was claimed by the manufacturer. Gas composition of incubation atmosphere affects cell viability of probiotic strains. The number of colony forming units of lactobacilli under microaerophilic conditions increased in 1,19-1,33 times as compared with aerobic conditions. It was proved that adhesive activity of probiotic Lactobacillus strains and sensitivity to 2°, 3°, 4° generations of cephalosporins (cefuroxime, cefotaxime, cefepime) and tetracyclines (doxycycline) also increased under microaerophilic conditions. The changes of the biological properties of lactobacilli under different cultivation conditions require further study for optimization of correction of dysbiotic disorders.

Key words: probiotic strains, lactobacteria, adhesive properties, growth characteristics, susceptibility to antibiotics.

ДОСЛІДЖЕННЯ АнтИБАКТЕРІАЛЬНОЇ АКТИВНОСТІ КОМБІНОВаниХ ПРЕПАРАТІВ ДЛЯ ЛІКУВАННЯ ВАГІНОЗІВ РіЗНОЇ ЕТІОЛОГІЇ

Бобрицька Л. О., Осолодченко Т. П., Рубан О. А.

ANTIBACTERIAL ACTIVITY OF COMBINATION DRUGS FOR TREATING VAGINOSIS DIFFERENT ETIOLOGIES

Bobritskaya L.O., Osolodchenko T.P., Ruban E.A.

Investigated the antimicrobial activity of the combination preparation in capsules "Meraflam" clinical of microbial strains isolated from patients with bacterial vaginosis. Experimentally proved the therapeutic dose of 0.3 g ornidazole in combination with Flamin 0.05 g, improve tolerability and expand the range of antibacterial action of the drug. In view of the antimicrobial capacity of diclofenac sodium from the combination of oxacillin proposed for use in an integrated circuit - inflammatory treatment of infectious diseases, including bacterial vaginosis.

Key words: antibacterials preparations, capsule, ornidazole, flamin, diclofenac sodium

ЗНАЧЕННЯ ДИНАМІКИ ДЕЯКИХ ІНТЕРЛЕЙКІНВІСЬКРОВАТКИ КРОВІ У ХВОРИХ НА МУЛЬТИРЕЗИСТЕНТНИЙ РЕЦІДИВ ТУБЕРКУЛІЗУ ЛЕГЕНЬ

Бутов Д. О.

THE VALUE OF THE DYNAMICS SOME INTERLEUKINS OF BLOOD SERUM IN PATIENTS WITH MULTIREZISTENT RELAPSE TUBERCULOSE LEGEN

Butov D.O.

The study of interleukin (IL)-2, IL-4 and IL-8 in 140 patients with pulmonary tuberculosis and 30 healthy donors. In patients with pulmonary tuberculosis before treatment was an increase levels of IL-2, IL-8 and decrease IL-4 compared to the relatively healthy donors. After two-month standard antimycobacterial therapy found significant decrease IL-2, IL-8 and increase IL-4 in patients with pulmonary tuberculosis. More significant changes were expressed as before treatment so after two months of chemotherapy were observed in patients with pulmonary multiresistant pulmonary tuberculosis, especially in patients with recurrent process than patients without the multiresistant pulmonary tuberculosis and newly diagnosed pulmonary tuberculosis.

Keywords: multidrug-resistant tuberculosis, recurrent tuberculosis, newly diagnosed tuberculosis, immunity, cytokines, interleukin.

ДОСЛІДЖЕННЯ НА МІКРОБІОЛОГІЧНУ ЧИСТОТУ СУПОЗИТОРІЙ "ФІТОПРОСТ" І "ТАМСУЛОПРОСТ"

Гриценко В. І., Рубан О. А., Осолодченко Т. П.

RESEARCH ON MICROBIOLOGICAL PURITY OF “PHYTOPROST” AND “TAMSULOPROST” SUPPOSITORIES

Gritsenko V.I., Ruban O.A., Osolodchenko T.P.

Results of the tests on microbiological purity of the test samples of "Tamsuloprost" and "Phytopyrost" suppositories for the treatment of prostate diseases have shown that no viable cells of fungi were found in the preparations, the number of viable cells of microorganisms is within a norman rate. Studying the effectiveness of antimicrobial preservatives it was found that the test samples meet criterion of the requirements of the State Pharmacopoeia of Ukraine.

Keywords: microbiological testing, suppositories, prostate.

УДОСКОНАЛЕННЯ СКЛАДУ ТА ТЕХНОЛОГІЇ ТАБЛЕТОК З БІЛКОМ СОНЯЧНИКА

Манський О. А.

IMPROVEMENT OF COMPOSITION AND TECHNOLOGY OF TABLETS WITH SUNFLOWER PROTEIN

Manscy A.A.

The work was dedicated to the improvement of composition and technology of tablets with plant proteins. As objects of research were chosen natural compounds: sunflower protein and immunomodulator (mix-factor). The manufacturing of tablets has been performed with preliminary wet granulation. Substitution of moisturizer from purified water to mix-factor. During the studies the new composition of immunomodulatory tablets has been developed, which meets SPU requirements, water substitution to mix-factor as a moisturizer has been justified, the optimum parameters of technological process have been determined, on the basis of experimental data it has been set that the granules are tablettable with addition of a binder.

Key words: immunetit, protein, technology, tablets.

АМІНОКИСЛОТНИЙ ПУЛЬКРОВЬІ ДІТЕЙ, ХВОРИХ НА АЛЕРГІЙНІ ЗАХВОРЮВАННЯ

Шмуліч О. В.

AMINO ACID BLOOD POOL OF CHILDREN WITH ALLERGIC DISEASES

Shmulich O.V.
The amino acid blood pool of children with atopic dermatitis, bronchial asthma, urticaria, angioedema was investigated. The variability of blood plasma amino acid content (tryptophan, histidine, tyrosine, cysteine, methionine) was observed. The changes of histidine and tryptophan levels might be connected with the formation of biogenic amines, such as histamine, serotonin, with take part in the development of allergic reactions and inflammatory processes in organism.

**Key words:** aminoacidical pool of blood, bronchial asthma, atopic dermatitis, urticaria, angioedema

**ГЕТЕРОГЕННІСТЬ ПОПУЛЯЦІЇ СТАФІЛОКОКІВ ЗА ОЗНАКОЮ МЕТИЦИЛІНРЕЗИСТЕНТНОСТІ**

Коцар О. В., Воронкіна І. А., Деркач С. А., Крилова І. А., Габишева Л. С.

**HETEROGENEITY OF STAPHYLOCOCCUS POPULATION ON THE BASIS OF METYTSYLIN RESISTANCE**


57 Staphylococcus strains were identified and excluded from patients. Metytsylin resistance of these strains was determined using disc-diffusion method and method of serial dilutions with oxacillin MIC determination. In *in vitro* studies of heterogeneity for the cultures with metytsylin resistance was revealed. Expression of heterogeneity was shown to be more typical for strains with low and average levels of oxacillin MICs.

**Keywords:** staphylococcal infection, metytsylin resistance, heterogeneity.

**ЛЕКЦІЇ**

**ОСОБЕННОСТИ ФАРМАКОТЕРАПІЇ САХАРНОГО ДИАБЕТА 2-ГО ТИПА**

Трищук Н. М.

**FEATURES PHARMACOTHERAPY OF DIABETES MELLITUS II TYPE**

Tryshchuk N. M.

Epidemiological increased incidence of diabetes mellitus is still ongoing. Treatment of patients with diabetes mellitus is challenging due to several factors: low level of diagnostics, difficulties in choice of drugs, the limited use of self-monitoring of glucose by patients, clinical failure medicines. Article defines the main groups of drugs that are needed for the treatment of diabetes mellitus type 2, based on the mechanism of action, dosage, side effects, contraindications and applications of algorithms. These articles will help to rationally choose hypoglycemic drugs for patients with diabetes mellitus type 2, thereby improving the condition of diabetics and reducing the risk of complications.

**Key words:** pharmacotherapy, diabetes mellitus II type

**Пам’яті вченого**

К 100-ЛЕТИЮ СО ДНЯ РОЖДЕНИЯ ВИРУСОЛОГА, АКАДЕМИКА ВИКТОРА МИХАЙЛОВИЧА ЖДАНОВА

Дивоча В. А.