### АННАЛИ МЕЧНИКОВСЬКОГО ІНСТИТУТУ 2010 рік № 4 3МІСТ

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НЕФЕРМЕНТИРУЮЩИЕ ГРАМНЕГАТИВНЫЕ БАКТЕРИИ В ЭТИОЛОГИИ НОЗОКОМИАЛЬНЫХ ИНФЕКЦИЙ И ПРОБЛЕМЫ АНТИБИОТИКОРЕЗИСТЕНТНОСТИ

Чернявский В.И., Бирюкова С.В., Гришина Е.И.

#### NONFERMENTING GRAMNEGATIVE BACTERIA IN THE ETIOLOGY OF NOSOCOMIAL INFECTIONS AND PROBLEM OF DRUG- RESISTANCE

Chernjavsky V.I., Birukova S.V., Grishina O.I.

A review is devoted to the group of nonfermenting bacteria (NFB) role of which in etiology of nosocomial infections the last years increased substantially. There is given the description of the most important types of microorganisms of this group and factors, determining their clinical value. The basic biochemical mechanisms of forming of drug- resistance NFB are resulted to the widely utilized antibiotics, that is the basic problem of therapy of diseases, conditioned these microorganisms.

### БІОЛОГІЧНІ ВЛАСТИВОСТІ БАКТЕРІЙ РОДУ STREPTOCOCCUS, ІЗОЛЬОВАНИХ ВІД ПАЦІЄНТІВ ІЗ АЛКОГОЛЬНИМ ДЕЛІРІЄМ

Лук'яненко Т. В.

#### BIOLOGICAL QUALITY OF STREPTOCOCCUS SP. ISOLATED FROM THE PATIENT WITH DELIRIUM ALCOHOLYCUM

Lukyanenko T. V.

Research of biological quality Streptococcus sp. of pacients whith alcogolism is problem of today. The patients whith alcogolism have the treatment of antibiotics. The proportion of lethality among people who abuse alcohol is about 4.21%. Diagnosis of streptococcosis require of conduction bacteological investigations whith isolation and identification of quality Streptococcus sp., serotaxonomy, definition of antibiotic-sensitive. The assosiation whith pathogenic-germ heppine for acquirement quality for persistencia Streptococcus sp., its afford to persist in definite econishe. Streptococcosis cause of response whith increase the antibody titer for extracellular antigen of Streptococcus sp. streptolysine O, deoxyribonuclease B, hyaluronidase and al. Also urgent development of a nutrient medium on the basis of vegetable component whith selective qualities for Streptococcus sp. Desease of streptococcosus depend on entry of infection, factors of pathogenety, the condition of immune system. Streptococcus sp. die under the influence of pasteurization and of the process solution many disinfectants, anticeptics, antibiotics. The bacterial count whith antibiotic resistance increases. Problem of today use the quaternary ammonium compound, the derivative of acridine and of quinolones.

ХРОМАТОГРАФІЧНІ МЕТОДИ: КЛАСИФІКАЦІЯ, ПРИНЦИПИ ТА ПРАКТИЧНЕ ЗАСТОСУВАННЯ Рижкова Т.А., Бабич Е.М., Калініченко С.В., Скляр Н.І., Рябовол О.В., Плугатор Т.М., Горбач Т.В., Антушева Т.І.,

Касьяненко Т.М.

#### CHROMATOGRAPHY: THE CLASSIFICATION OF CHROMATOGRAPHY, PRINCIPLES AND PRACTICE OF CHROMATOGRAPHY

Ryzhkova T. A., Babych E.M., Kalinichenko S.V., Sklyar N.I., Rjabovol O.V., Plugator T.N., Gorbach T.V., Antusheva T.I.,

Kasjanenko T.N.

The history of chromatographic technique development is briefly described in this article. The classifications of above mentioned methods by stationary and mobile phases aggregate state, by mechanism of separation, by form of stationary phase, by type of development process are presented. The main principles of operation of chromatographic apparatus, including chromatographic detectors, are characterized. Chromatography nomenclature and formula evaluation of the main chromatographic characteristics are presented. The different chromatographic techniques applications are described.

СТРУКТУРА И БИОЛОГИЧЕСКАЯ АКТИВНОСТЬ НЕКОТОРЫХ РАСТИТЕЛЬНЫХ ЭЛЛАГИТАНИНОВ, ВЫДЕЛЕННЫХ ИЗ РАЗНЫХ ПРЕДСТАВИТЕЛЕЙ РОДА МИРТОВЫХ Мустафа Аль-Хуссейн, Мартынов А.В.

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#### STRUCTURE AND BIOLOGICAL ACTIVITY OF SOME VEGETABLE ELLAGITANNINS FROM MYRTACEAE Mustafa Al-Hussein, Martynov A.

In the article are presented the review about structure, activity, and disseminating hydrolyzed tannins containing a fragment ellagic (digallic) acids. It is shown that the widest possible group of tannins in Myrtle. Virtually all of the family of this type contain some form of ellagitannins. Presents the results of the study of biological activity as individual substances from ellagitannins groups and summary extracts: shows a powerful antioxidant, antidiabetics, anticancer, antiviral, antifungal, antibacterial and antileishmania effects specified connection. It is shown that the pharmacological activity involves inhibition by ellagitannins the enzyme and manifests itself as a model in vitro in animal models at very low toxicity. Presented the conclusions about potential introduction of medicines based on both new and newest group natural substances - ellagitannins.

#### Експериментальні праці

АНТИМІКРОБНА АКТИВНІСТЬ ЕКСТРАКТІВ IRIS PSEUDACORUS L. Затильнікова О.О., Осолодченко Т.П., Ковальов В.М.

#### ANTIMICROBIAL ACTIVITY OF EXTRACTS OF IRIS PSEUDACORUS L. Zatvlnikova O.A., Osolodchenko T.P., Kovalev V.N.

The bactericidal activity of total preparations from the rhizomes and leaves of Yellow Iris by agar diffusion and dilution technique was established. The dry extracts of rhizome and leaves dissolved in water, DMSO, 40% and 50% alcohol. A concentration presented 10,0% and 20,0%. Preparations of rhizome (10,0%) have more expressed antibacterial activity, than preparations are from leaves. The more sensible of microorganisms appeared B.subtilis, S.aureus, P.aeruginosa, E.coli, preparations showed a less sensitiveness to C.ablicans. The antibacterial activity of preparations from the rhizome was confirmed of method of dilution technique in relation to S.aureus (MRC of 5,0 mg/ml), E. of coli (MRC of 5,0 mg/ml), P.aeruginosa (MRC of 10,0 mg/ml). For preparations of leaves MRC arrives at 20,0 mg/ml. Preparations answer the requirements of Pharmacopoeia of Ukraine at research on a microbiological cleanness.

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ПОКАЗНИКИ РЕЗИСТЕНТНОСТІ У ХВОРИХ НА ПНЕВМОНІЮ РІЗНОЇ ЕТІОЛОГІЇ Єгошина В.О., Коляда О.М., Бруснік С.В., Михайличенко М.С., Аттіков В.Є., Нестеренко А.М., Коляда Т.І.

### IMMUNOLOGIC FEATURES OF THE CURRENT OF THE PNEUMONIA OF DIFFERENT ETIOLOGY Egoshina V.A., Koljada O. N., Brusnik S.V., Mihajlichenko M. S., Nesterenko A.M., Attikov V. E., Koljada T.I.

Spent immunologic inspection patient with nonhospital pneumonia of a various etiology. During research it has been established, that atypical unlike a staphylococcus pneumonia develop against oppression of the T-cellular link, and in a smaller 48 measure of phagocytic reaction. There are also changes in a humoral link of immunity, about what quantity rising B-lymphocytes (CD19 +), IgM titer and CIC level testifies. At staphylococcus pneumonia prevalence of the proinflammatory cytokines takes place. Absence of rising of level of proinflammatory cytokines, especially IL-1 $\beta$ , at pneumonia advance is prognostically adverse.

### ДІЯ АНТИСЕПТИЧНИХ ЗАСОБІВ НА ПАТОГЕННІ МЕХАНІЗМИ БАКТЕРІЙ Жорняк О. І., Стукан О. К., Сухляк В. В.

#### ACTION OF THE PILL ANTISEPTICS ONTO PATHOGENIC MECHANISMS OF BACTERIA Zhornjak O. I., Stukan O. K., Suchljak V. V.

The results of studying of effect of antimicrobial agents on the adhesion of gram-positive and gram-negative microorganisms were discribed. Studies have shown that antiseptics septefril, sebidin, adzhysept inhibited adhesion of bacteria. The lowest index of adhesiveness observed in the presence of septefril was - 39,51-34,08% for museum strains of staphylococcus and 51,7-51,9% for clinical strains of staphylococcus, that in 2,53 and 1,93 times less in comparison with the control.

ВЛИЯНИЕ ТЕРАПИИ ИММУНОЛОГЛОБУЛИНОМ ЧЕЛОВЕКА НОРМАЛЬНЫМ ДЛЯ ВНУТРИВЕННОГО 59 ВВЕДЕНИЯ НА ОСНОВНЫЕ ПАРАМЕТРЫ МЕСТНОГО И СИСТЕМНОГО ИММУНИТЕТА ДЕТЕЙ, ЧАСТО БОЛЕЮЩИХ ОСТРЫМИ РЕСПИРАТОРНЫМИ ИНФЕКЦИЯМИ С СИНДРОМОМ ЛИМФАДЕНОПАТИИ

Попов Н.Н., Савво А.Н., Колиушко Е.Г.

# INFLUENCE OF THERAPY BY AN IMMUNOGLOBULIN OF THE PERSON NORMAL FOR INTRAVENOUS INTRODUCTION ON KEY PARAMETERS LOCAL AND SYSTEM IMMUNITY CHILDREN, OFTEN ILL SHARP RESPIRATORY VIRUS INFECTIONS WITH A SYNDROME LYMPHADENOPATHY Popov N.N., Savvo A.N., Koliushko E.G.

The purpose of the present research was studying of efficiency of application of an intravenous immunoglobulin (IVIG) in treatment of often ill children by sharp respiratory virus infections with a syndrome lymphadenopathy. The obtained data specifies that application ivig allows about treatment terms, in 3 times reduces disease DRS within a year, warns development of bacterial complications, liquidates lymphadenopathy. At children receiving IVIG, dynamical increase of local and system immunity, activization of anti-virus immunity, normalization of funktsional th activity of lymphocytes and phagocytes cages is

observed. Under the influence of IVIG spontaneous and IL-2-induction proliferative activity of lymphocytes, and also spontaneous production IL-2 and IL-10 at patients decrease to normal values. The offered therapy allows to normalize in short terms it-munnye processes with which development of lymphadenopathy associates.

#### ДОСЛІДЖЕННЯ ПРОТИГРИБКОВОЇ АКТИВНОСТІ КОМБІНОВАНИХ ПЕСАРІЇВ «КЛІМЕДЕКС» Левачкова Ю.В. Степанова К.О.

#### SCIENTIFIC INVESTIGATION OF ANTIMYCOTIC ACTION OF COMBINED PESSARIES "CLIMEDEX" Levachkova Y.V., Stepanova K.A.

Data of microbiological studies of combined pessaries on the base of substances of synthetic and natural origin have been given and the perspectiveness of development of combined remedy for treating of vaginal candidosis is shown. By the conducted analysis of antimycotic activity of pre-productions models of pessaries with fluconazole depending on his maintenance, it was set, that all standards have a moderate or expressed antimycotic effect as compared to the control, however most rational and perspective for the further study there is a standard 2b of combined pessaries «Climedex». In addition, it is defined from data of experiment, that adding of fluconazole to the composition of a drug allows to extends its pharmacological spectrum of action.

## ІМУНОЛОГІЧНІ КРИТЕРІЇ ПРОГНОЗУВАННЯ РИЗИКУ РОЗВИТКУ ГОСТРОГО КОРОНАРНОГО СИНДРОМУ У ОСІБ З ІШЕМІЧНОЮ ХВОРОБОЮ СЕРЦЯ, ІНФІКОВАНИХ ВІРУСАМИ РОДИНИ HERPESVIRIDAE

Перемот С.Д., Смілянська М.В., Волянський А.Ю., Перемот Я.О., Кашпур Н.В., Усенко С.А.

### IMMUNOLOGICAL CRITERIA OF PROGNOSTICATION OF RISK OF DEVELOPMENT OF ACUTE CORONAL SYNDROME AT PERSONS WITH ISCHEMIC HEART DISEASES, INFECTED THE VIRUSES OF HERPESVIRIDAE

#### Peremot S.D., Smelyanskaya M.V., Volyanskiy A.J., Peremot J.A., Kashpur N.V.

Immunological criteria of prognostication of risk of development of acute coronal syndrome (ACS) at persons with IHD infected the viruses of family of Herpesviridae. The increases of risk of origin of ACS establish at presence of tendency to the decline (on 33 % and more) of amount of lymphocytes of CD3, CD4, CD8 and their correlation (CD4/CD8), decline of indexes of reaction functionly incomplete T lymphocytes at the simultaneous increase (on 33 % and more) of indexes of maintenance of proinflammatory TNF, and also to the exposure of antigens of viruses of family of Herpesviridae in leucocytes (IF).

#### ЯМР-ДИАГНОСТИКА НАНОКОМПОЗИТОВ НА ОСНОВЕ ГИДРОГЕЛЕВЫХ МАТРИЦ, СОДЕРЖАЩИХ ИНКОРПОРИРОВАННЫЙ ГИДРОКСИЛАПАТИТ

Болдескул И.Е, Самченко Ю.М., Данильченко С.Н., Трачевский В.В., Суходуб Л.Б., Волянский А.Ю., Кучма И.Ю., Ульберг З.Р., Суходуб Л.Ф.

#### 31P MAS MRS DIAGNOSTIC OF THE HYDROGEL-BASED NANOCOMPOSITES WITH INCORPORATED HYDROXYAPATITE

Boldeskul I.E. Samchenko Y.M., Danilchenko S.N., Trachevsky V.V., Sukhodub L.B., Voljansky A.Y., Kuchma I.Y., Ulberg Z.R.,

Sukhodub L.F.

31P MAS Magnetic resonance spectra have demonstrated that the hydration level of the hydrogel matrix before treatment by ammonia solution (at the end stage) crucially influence of the structure of calcium phosphates. The predominant formation of the hydroxyapatite takes place when the structure has a maximum hydration level. In the dehydration case of the same structure a TCP phase is formed.

## ВИВЧЕННЯ ДЕЯКИХ ФАКТОРІВ ПЕРСИСТЕНЦІЇ АНТИБІОТИКОРЕЗИСТЕНТНИХ ЗБУДНИКІВ ГНІЙНО-ЗАПАЛЬНИХ УСКЛАДНЕНЬ В ТОРАКОАБДОМІНАЛЬНІЙ ХІРУРГІЇ Дяченко В.Ф., Ягнюк Ю.А., Марющенко А.М., Бакуменко А.В., Городницька Н.І.

## STUDY OF SOME PERSISTANCE FACTORS OF ANTIBIOTIC-RESISTANCE STRAINS OF PYOINFLAMMATORY COMPLICATIONS IN THORACOABDOMINAL SURGERY Dyachenko V.F, Yahnyuk J.A, Maryuschenko A.M, Bakumenko A.V., Gorodnitskaya N.I.

The research of persistance properties (antilyzocimic, anticomplementic and adhesive activity) of strains of pyo-septic infections which was selected in thoracoabdominal surgical hospitals was conducted and was assessed their informative in predicting of the formation of antibiotic-resistants these pathogens. Established that antibiotic-resistants strains created more significant depressing effect against complement and lysozyme than the moderately resistant.

ДИФФЕРЕНЦИАЛЬНО-ДИАГНОСТИЧЕСКАЯ СОПОСТАВИМОСТЬ МОРФОЛОГИЧЕСКИХ МАРКЕРОВ 82 ВОСПАЛИТЕЛЬНО-ДЕГЕНЕРАТИВНЫХ ИЗМЕНЕНИЙ В ГОЛОВНОМ МОЗГЕ ПРИ ИШЕМИЧЕСКОМ ИНСУЛЬТЕ И ГЕРПЕСВИРУСНОЙ НЕЙРОИНФЕКЦИИ (ПО ДАННЫМ КЛИНИКО-

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#### ЭКСПЕРИМЕНТАЛЬНЫХ ИССЛЕДОВАНИЙ) Торяник И.И., Колесник В.В.

DIFFERENTIAL AND DIAGNOSTIC COMPARIENCE OF THE MORPHOLOGICAL MARKERS OF THE INFLAMMATORY AND DEGENERATIVE CEREBRAL CHANGES IN THE ISCHEMIC STROKE AND HERPESVIRAL NEUROINFECTION (for the data of the clinical and experimental investigations) Torianik Inna I., Kolesnik Vladimir V.

The studing results of the differential and diagnostic comparience of the morphological markers of the inflammatory and degenerative cerebral changes in the ischemic stroke and herpes virus neuroinfection were presented in the article. The research material were the data of the clinical and the experimental elaborations. With the morphological methods analysis was revealed: hyperchromatism of the neurocyte's, fragmentation of the chromatin, karyopyknosis, destruction of the mitochondrion, the granular and a granular reticulum, availability of the lysosomic inclusion, vacuolar dystrophy. Symptoms of the focal gliosis and the cells- shadow accumulation around the pathologically changed capillary was taked is a special place in the differential diagnostic of each pathology. Microvessels and neurocytes structure changes were been accompanied astrocyte processes oedema. Infiltrative and proliferative symptoms were demon-strated inflammatory reaction.

ВПЛИВ МУЛЬТИПРОБІОТИКУ «СИМБІТЕР-2» НА МІКРОБІОЗЕНОЗ РОТОВОЇ ПОРОЖНИНИ У ХВОРИХ НА ВТОРИННУ АДЕНТІЮ Балак О.К.

### THE INFLUENCE OF MULTIPROBIOTIC "SIMBITER-2" ON THE MOUTH'S MICROBIOCENOSIS OF THE PATIENTS WITH SECONDARY ADENTIA Balak O. K.

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The article is devoted to increasing the effectiveness of therapy of patients with secondary adentia and to improving of microbiocenotic rehabilitation of patients with secondary adentia that are in need of orthopedic treatment with taking off dentures accounting microbiological monitoring and immunological, biological indexes. The peculiarities of mouth's microbiocenosis in the treatment using the probiotic "A-bacterin" and symbiotic "Simbiter-2" in combination are determined.

Ювілеї 80-ЛЕТНИЙ ЮБИЛЕЙ МАКАРЕНКО КОНСТАНТИНА КОНСТАНТИНОВИЧА (памяти Учителя, ученого, педагога, врача)