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СКАЗ В УКРАЇНІ: ЕПІДЕМІЧНА ТА ЕПІЗООТИЧНА СИТУАЦІЯ, ЗАСОБИ ДЛЯ ПРОФІЛАКТИЧНОЇ ТА ЛІКУВАЛЬНО-ПРОФІЛАКТИЧНОЇ ІМУНІЗАЦІЇ Новикова О.Ю., Лаврик О.А., Панченко Л.О. RABIES IN UKRAINE: EPIDEMIOLOGICAL AND EPIZOOTIC SITUATION, MEANS FOR PREVENTIVE AND THERAPEUTIC IMMUNIZATION Novikova O., Lavrik A., Panchenko L. Epidemiological and epizootic situations of rabies in Ukraine were analyzed. Active centers of animal rabies formed in many areas where 2016 persons were attacked by animals (mostly dogs suspected on rabies) during 2011 year. Characteristics of preparates on rabies prevention, and basic methods of analyzing the specific activity of rabies vaccines were described. Keywords: epidemic and epizootic situation on rabies, rabies vaccine, rabies immunoglobulin.	6-9
PHARMACEUTICAL CARE IN THE TREATMENT OF PATIENTS WITH INFECTIONS OF THE LOWER URINARY TRACT  Moroz V.A.  In order to monitor changes in the recommendations for drug treatment of lower urinary tract infections (UTI) and pharmaceutical care of patients analyzed resolution and related publications of American Urological Association at the end of 2012. Marked improvement of detail factors of chronicity UTI and allocation of roles pharmacist to prevent its recurrence. In the arsenal of treatments for uncomplicated disease (about 80%) left Co-trimoxazole, but exclude the scheme of its single administration. In complicated UTI the use of recommended combinations of antibiotics extended to 14 days, introduced the scheme extended use of Co-trimoxazole or fluoroquinolones in bacterial prostatitis and epididymitis. Formulated the principles of pharmaceutical care of patients with UTI and stated that this pathology are results from the interaction of several biomedical factors that must be considered for the rational choice of treatment strategy. Implementation of pharmaceutical care of patients with UTI is an important component of the treatment success and prevention of disease recurrence.  Key words: urinary tract infections, pharmaceutical care, antibiotic therapy, bacteriuria.	10-15
ORMS IN SURPRISING PLACES: CLINICAL AND MORPHOLOGICAL FEATURES Adeyemi A. A., Borzenkova I. V., Myroshnychenko M. S., Pliten O. N. Helminthes are the most common human diseases, which are characterized by involvement in the pathological process of all organs and systems. In this article, the authors discuss a few cases of typical and atypical localizations for parasitic worms such as filarial and pinworms which were recovered from surprising places in the bodies of patients in Kharkiv region. This article will allow the doctors of practical health care to pay special attention to the timely prevention and diagnostics of this pathology. Keywords: helminthes, filarial, pinworm, localization, features.	16-24
ВИЯВЛЕННЯ ГЕНІВ ПАТОГЕННОСТІ В V.PARAHAEMOLYTICUS, ВИДІЛЕНИХ В ПІВДЕННИХ РЕГІОНАХ УКРАЇНИ Петренко О.В., Алексеснко В.В., Лисенко З.А. RECOGNITION OF PATHOGENIC GENES IN V.PARAHAEMOLYTICUS, ISOLATED IN SOUTHERN REGIONS OF UKRAINE Petrenko O. V., Alekseenko V.V., Lysenko Z.A. Study of genetic determinants of V.parahaemolyticus showed a correlation between geno- and phenotypic attributes of parahaemolytic vibrios. Presence of pathogenic genes tdh or trh in	25-28

parahaemolytic vibrios genome, which are responsible for TDH and TRH hemolysins production,

indicates their virulent properties, which in turn are exhibited by vibrios in haemolytic

activity. Application of molecular-genetic studies along with other methods of differentiation of V. parahaemolyticus allows for accelerating and improving its laboratory diagnostics.

Keywords: vibrios, V.parahaemolyticus, halophiloses, hemolysins, pathogenic genes.

# ВИСХІДНИЙ ШЛЯХ ІНФІКУВАННЯ ПЛОДУ ТА ФОРМУВАННЯ КИШКОВОГО МІКРО- БІОЦЕНОЗУ У НОВОНАРОДЖЕНИХ ДІТЕЙ

Куновська Л.М.

ASCENDING WAY INFECTION NEWBORNS AND THE FORMATION OF INTESTINAL MICROBIOCENOSIS OF THE NEWBORN

Kunovskaya L. M.

The role and value of the bacterial factor in development pre-natal infection of newborns is studied. It is considered microflora of patrimonial ways of pregnant women, as basic pathogenesis factor of an ascending way infection of newborns. On an example of the spent bacteriological researches correlation communication between microflora of patrimonial ways, placenta and an ascending way infection of newborns is shown. At crops gastric swallowing at newborn children with pre-natal infection of newborns it is ascertained growth aerobic and aanaerobic microflora in the majority (87,7 %) supervision in the form of microbes associations gramme-positive coccus Staphylococcus epidermidis and Staphylococcus aureus and Candida. The inclusion in the treatment of Saccharomyces boulardii contributes to the restoration of intestinal microflora in 90 % of newborns. Found significant growth of the colonies of Bifidobacterium spp. (3.7-4,9 lg CFU/ml) and Lactobacillus spp. (7.2 lg CFU/ml).

Keywords: pre-natal infection of newborns, microflora, Saccharomyces boulardii

### ВЛИЯНИЕ ОКСИЭТИЛИРОВАННЫХ АЛКИЛФЕНОЛОВ НА ГОРМОНАЛЬНЫЙ ОБМЕН БЕЛЫХ КРЫС В ПОДОСТРОМ ЭКСПЕРИМЕНТЕ

Маракушин Д.И., Наконечная О.А., Максимова И.Г.

THE INFLUENCE OF OXYETHYLIZED ALKYLPHENOLS ON HORMONAL EXCHANGE OF WHITE RATS IN THE SUBACUTE EXPERIMENT

Marakushin D.I., Nakonechnaya O.A., Maximova I.G.

The Influence of oxyethylized alkylphenols AF9-6, AF9-10 and AF9-12 has been studied in doses 1/10 and 1/100 DL<sub>50</sub> on the hormonal profile of white rats in the conditions of subacute experiment. It has been studied, that xenobiotics cause disturbances from the side of the endocrine system at all level of its structurally-functional organization (hypothalamus – hypophysis – thyroid and parathyroid glands – adrenal glands). Neonols manifest polytropic character of action on an organism, which can be attended with formation of the multiple pathological states in the basis of which membrane pathology lies. **Keywords: neonols, hormonal profile, oxyethylized alkylphenols.** 

ЧУТЛИВІСТЬ ШТАМІВ СТАФІЛОКОКІВ, ЗБУДНИКІВ ГНІЙНО-ЗАПАЛЬНИХ ІНФЕКЦІЙ, ДО КОМЕРЦІЙНИХ ПРЕПАРАТІВ-БАКТЕРІОФАГІВ

Деркач С.А., Воронкіна І.А., Коцар О.В., Крилова І.А., Головенькіна Н.А.\*, Головахіна Л.М.\*\*

SUSCEPTIBLE STRAINS OF STAPHYLOCOCCI, AGENTS CHRONIC INFLAMMATORY INFECTION HAVE ACCESS TO COMMERCIAL PREPARATIONS OF BACTERIOPHAGE Derkach SA, Voronkina IA, Kotsar OV, Krylov IA, Golovenkina NA, Golovahina LM.

The wide spread of pathogenic microorganisms with a high resistance to antibiotics causes the search for new approaches to the treatment of patients with purulent-inflammatory diseases. One promising area is the "resuscitation" and the improvement of phage therapy. Data on the sensitivity of the circulating on the territory of Ukraine strains of staphylococci isolated from various habitats of patients to drugs imported from Russia bacteriophages remain outstanding. We conducted a study to determine fag's sensitivity S. aureus and CNS to staphylococcal bacteriophage, sekstafags and piobakteriofags showed lytic activity of various antimicrobial agents. The most promising of the drugs studied bacteriophages to treat staphylococcal disease in the Kharkov region is piobakteriofag.

Key words: Staphylococcus aureus, pyoinflammatory diseases, bacteriophage

АПОПТОЗ ФАГОЦИТУЮЧИХ КЛІТИН, ІНДУКОВАНИЙ МІКОБАКТЕРІЯМИ ТУБЕРКУЛЬОЗУ З РІЗНОЮ ВІРУЛЕНТНІСТЮ ІЛЬЇНСЬКА І. Ф. , ЗУБРІЙЧУК О. М.

APOPTOSIS INDUCTION IN THE PHAGOCYTIC CELLS BY MYCOBACTERIUM TUBERCULOSIS WITH DIFFERENT VIRULENCE

Ilyinskaya I.F., Zubriychuk O.M.

The purpose of this study was to investigate the characteristics of phagocytic cells apoptosis induced in vitro and in vivo by Mycobacterium tuberculosis with different virulence. For this aim the main feachers of apoptosis of peritoneal macrophages, neutrophyles, monocytes, induced in vitro by living

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and dead MBT H37Rv and BCG in intact animals, healthy subjects and patients with tuberculosis were expected, as well as features of apoptosis of neutrophils and peritoneal macrophages of animals infected with MBT H37Rv and BCG. It was found that the virulent Mycobacterium tuberculosis have a powerful apoptogenic effect on phagocytic cells, and the loss of pathogen viability and virulence causes its weakening. It was demonstrated that the induction of apoptosis by Mycobacterium tuberculosis is realised both directly and indirectly, probably through their influence on the production of cell interaction mediators. It was detected that in order to limit excessive loss of phagocytes due to apoptosis, virulent mycobacteria use mechanisms that prevent infection of these cells.

Key words: apoptosis, peritoneal macrophages, neutrophils, monocytes, Mycobacterium tuberculosis, virulence, vitality, experimental tuberculosis, BCG vaccination.

#### ВПЛИВ ПЕРОРАЛЬНОГО ВВЕДЕННЯ КАШЛЮКОВИХ АНТИГЕННИХ ПРЕПАРАТІВ НА ДЕРМОНЕКРОТИЧНУ РЕАКЦІЮ У КРОЛІВ

Єлисеєва І. В., Бабич Є. М., Ждамарова Л. А., Білозерський В. І., Ісаєнко О. Ю., Бобирєва І. В.

INFLUENCE OF PREVIOUS ORAL APPLICATION OF PERTUSSIS ANTIGENIC PREPARATIONS ON RABBIT ALLERGIC REACTION FORMING AFTER SKIN TEST Yelyseyeva I. V., Babych Ye. M., Zhdamarova L. A., Belozersky V. I., Isayenko Ye. Yu., Bobireva I. V.

It's studied an influence of previous oral application of pertussis antigenic preparations, which obtained by the pertussis pathogen ultrasonic disintegration and centrifugation, on allergic inflammation forming after skin test. Obtained results testify to the sensitizing effect of high doses of the B.pertussis ultrasonic preparation and decreasing of hyperemia reaction when attenuating of peroral dose of disintegration. Got out from B. pertussis microbe cells antigenic preparation appeared considerably less reactogenious, nontoxic for neutrophilic leukocytes according to in vitro test and showed a tendency to decreasing manifestation of rabbit skin reactions.

Key words: pertussis pathogen, antigenic preparations, oral imunization, skin allergic reaction.

# МІКРОБІОЦЕНОЗ РОТОГЛОТКИ У ХВОРИХ НА ТУБЕРКУЛЬОЗ ЛЕГЕНЬ ВИННИЧУК М.О., КЛИМНЮК С.І., ВИННИЧУК Л.Р. OROPHARYNGEAL MICROBIOCENOSIS IN PATIENTS WITH PULMONARY TUBERCULOSIS

Vynnychuk M.O., Klymnyuk S.I., Vynnychuk L.R.

Classical bacteriological method for examination of stomatopharynx microflora in 58 patients with lung tuberculosis and 21 practically healthy persons subjects of both sexes, aged from 18 to 43 years for revealing of microbiocenoses differences and justifying its correction in patients with lung tuberculosis was used. The dysbiotic changes of stomatopharynx microbiocenosis with lack of typical inhabitants of this biotope such as *Lactobacilli* and *Fuzobacteria*, as well as appearance of *Enterococcus spp.* (12,1 %), *Veillonella spp.* (22,4 %) *S. aureus, Pseudomonas spp.* were observed in patients with lung tuberculosis. The frequency of of *Candida spp.* carriage in tuberculosis patients was in 2 times more, than in healthy persons and their colonization level was more too. But such index for *Neisseria spp.* and *Peptostreptococcus spp.* carriage was less. (p<0,05). Thus, use of antimycobacterial drugs deepens sytomatopharynx dysbiosis. It must be taken into consideration during complex treatment of patients with lung tuberculosis.

Key words: pulmonary tuberculosis, oropharynx, microbiocenosis.

## ЕКСПЕРИМЕНТАЛЬНІ РОБОТИ, ФАРМАЦІЯ/ХІМІЯ (EXPERIMENTAL STUDY, PHARMACY/CHEMISTRY)

РЕАКЦІЯ АРОІЛМЕТИЛЕНТРИФЕНІЛФОСФОРІЛІДІВ З БОРФТОРИДАМИ АРИЛДІАЗОНІЮ І ПРОТИМІКРОБНА АКТИВНІСТЬ ФОСФОНІЙГІДРАЗОНІВ Маланчук С.Г.

REACTION AROILMETHYLENTRIPHENILPHOSPHRILIDES WITH ARILDIASONIY BORPHTORIDES AND ANTIMICROBIAL ACTIVITY PHOSPHONIYHIDROSONES Malanchuk S. G.

The reactions of electrophilic accession borftoryds aryldizoniy by P-C connection aroyilmetylentryphenylfosforilids were studied. Found that the reaction formed borftoryds hidrazonofosfoniy salts. Studied the chemical and physical properties and antimicrobial activity of synthesized compounds.

Keywords: borftoryds aryldiazoniy, aroyilmethylentryfenylfosforilids, fosfoniyhidrazony,  $\alpha$ -azoaroyilmetylentryphenylphosphorilids, antimicrobial activity.

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### СИНТЕЗ ТА ФІЗИКО-ХІМІЧНІ ВЛАСТИВОСТІ АЦИЛЬОВАНИХ ТАНІДІВ Мустафа Аль Хуссейн, Мартинов А.В. SYNTHESIS AND PHYSICO-CHEMICAL PROPERTIES OF ACYLATED TANNIN'S

Mustafa Al Hussein, Martynov AV

One of the areas in the search for new pharmacologically active compounds and the study is to obtain modified derivatives of natural substances. The goal was to synthesize a series of acylated derivatives of gallo-and ellagitannins and explore their physical and chemical properties. As a result, a number of studies have been synthesized acylated derivatives of the gallotannins and ellagitannins and studied their physico-chemical properties. Tannin were obtained from a commercial gallotannin and ellagotannins from alder cones. The main objectives of the study was to confirm the possibility of establishing a stable esters between the phenolic groups of gallic acid and ellagic tannins and acylating derivatives of dicarboxylic acids. The structure of the synthesized compounds is confirmed using the method of thin layer chromatography and NMR 1H. It is shown that only tannin, gallic acid derivatives which are capable of forming a fully substituted phenyl for all available hydroxyls. In the structure of ellagic acid derivatives - ellagitannins remain unsubstituted phenyl hydroxyls due to the presence of steric hindrance.

Keywords: succin-ellagic acid, succin-gallic acid, succin-tannides, structure

### ЛЕКЦІЇ (LECTURES)

## THE DIFFERENTIAL DIAGNOSIS OF CARDIOMEGALY IN CHILDREN (Lecture) Holodnyak O.V.

The topic of the lecture is "The differential diagnosis of cardiomegaly in children". The general symptoms of cardiomegaly, normal heart size and its cavities, depending on age are shown. The differential diagnosis of cardiomegaly was made depending on the etiology. Each year grows the number of children with heart disease of different etiology accompanied by the increase of heart borders both locally and totally. We can influence on this process only through the timely detection of disease, the differential diagnosis of heart disease and the appropriate treatment.

Keywords: cardiomegaly in children, differential diagnosis, heart failure, heart defects.

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