МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ

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106-ї підсумкової науково-практичної конференції
з міжнародною участю
професорсько-викладацького колективу
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Висновки. Застосування у комплексній терапії пацієнтів з розацеа з еритематозно-телеангіектатичними та папуло-пустульозними проявами на шкірі та наявністю супутнього дисбіозу кишечнику мультипробіотика (із вмістом біфідобактерій, лактококів, лактобацил та іншої нормофлори) та комбінованого ангіопротекторного препарату (із вмістом діосміну та гесперидину) прискорює регрес елементів висипки, сприяє нормалізації мікробіому товстого відділу кишечнику, а також достовірно покращує віддалені результати лікування таких пацієнтів – подовжує стан клінічної ремісії та зменшує частоту рецидивів дерматозу.

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ФАРМАКОЛОГІЧНА ДІЯ ТА ФАРМАКОКІНЕТИКА ЛІКАРСЬКИХ ЗАСОБІВ

Drachuk V.M.

MARKETING ANALYSIS OF THE ASSORTMENT OF DICLOFENAC SODIUM DRUGS IN THE PHARMACEUTICAL MARKET OF UKRAINE

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Introduction. Rheumatic diseases are the most common cause of disability, which includes a heterogeneous group of connective tissue diseases (dermis, tendon-ligamentous apparatus, cartilage, bone tissue, synovial and serous membranes, basement membranes of vessels, etc.), which has a multifactorial and not fully understood etiology. Conservative treatment mainly includes non-steroidal anti-inflammatory drugs (NSAIDs) remain the most effective and frequently used means for the treatment of this pathology. Diclofenac sodium, a phenylacetic acid derivative, is a nonsteroidal anti-inflammatory, analgesic agent recommended for use in rheumatoid arthritis, degenerative joint disease, ankylosing spondylitis, and related conditions, as well as for the treatment of pain resulting from minor surgery, trauma, etc. On the pharmaceutical market, it is presented in various dosage forms, which allows you to use the drug both in chronic conditions and in case of exacerbation of the disease. The mechanism of action of the drug is based on the non-selective inhibition of cyclooxygenase (COX-1,2), and the physiological effect of this substance is due to a decrease in the production of prostaglandins, revealing a typical triad of pharmacological effects - analgesic, anti-inflammatory and antipyretic. Since diclofenac penetrates the synovial fluid, where its maximum concentration is reached 2-4 hours later than in the blood plasma, that is why the drug is the drug of choice for inflammatory and degenerative forms of rheumatic diseases.

The aim of the study is to conduct a marketing analysis of the range of diclofenac sodium drugs registered in the pharmaceutical market of Ukraine and to determine the prospects for their further use in medicine.

Material and methods. The object of the study was the nomenclature of medicines with the active ingredient diclofenac sodium, which are presented on the pharmaceutical market of Ukraine and entered into the State Register of Medicinal Products of Ukraine. The research used the methods of marketing analysis of the assortment of medicines and statistical processing of the obtained data.

Results. According to the results of the marketing research, it was established that 105 names of medicinal products with the active ingredient diclofenac sodium are registered in the pharmaceutical market of Ukraine. Among them, 17 items are combined drugs. Effective combinations are the combination of sodium diclofenac with lidocaine hydrochloride, menthol, methyl salicylate, paracetamol, chondroprotectors - glucosamine sulfate and chondroitin sulfate, and B vitamins. The analysis of the drug market structure by the producing countries showed that 33.3% (35 items) of consumers are supplied with domestic drugs and 66.7% (70 items) with foreign products. Among drugs manufactured abroad, the leading place is occupied by drugs manufactured in India (30%) and Germany (22.85%), the same specific weight belongs to drugs from Slovenia

and Romania - 8.6% and 7.1%, respectively. A small number of drugs manufactured by pharmaceutical enterprises of other countries in the ratio of 4.3%, 2.9%, and less. Research of the pharmaceutical market in terms of the contribution of different dosage forms of release showed that diclofenac drugs are presented in 8 different dosage forms, among which the largest share is the dosage form - gel (30.5%), relatively large shares are occupied by enteric tablets (24 .8%), solutions for injections (17.1%) and rectal suppositories (10.5%). Other dosage forms are presented in lower percentage ratios.

Conclusions. Given the wide range of use of sodium diclofenac in medical practice, it can be considered that it belongs to the drugs of the first line of pathogenetic therapy for rheumatic diseases. The results of a comprehensive marketing analysis of the assortment of the domestic market indicate a significant share of drugs with the active ingredient diclofenac sodium among other medicinal NSAIDs, with a variety of dosage forms. However, when prescribing drugs, it is also important to evaluate the effectiveness/safety and price/quality ratio, which is important for the patient.

Filipets N.D.

ASSESSMENT OF THE ROLE OF ATP-DEPENDENT POTASSIUM CHANNELS IN MECHANISMS OF ACID-BASE BALANCE

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Introduction. Disruption of homeostasis in hypoxia is followed by dysfunction of the systems and organs that regulate the acid-base state. The multifaceted mechanisms of the pH control system indicate that maintaining interstitial and intracellular pH within a narrow range is of primary physiological importance. Scientific evidence indicates that many acid-sensitive ion channels and receptors play a role in the acid-sensitivity of the body's responses, acid-induced pain, and acid-induced regulation of homeostatic responses. Healthy kidneys correctly coordinate several physiological reactions in conditions of acute and chronic disturbances of the acid-alkaline balance. However, damaged kidneys have a reduced ability to adapt to such problems. Not only secretion and maintenance of electrolyte balance, but potassium ion channels also regulate cell volume; they are integral to cellular functions in all tubular cells due to their key role in generating the cell's negative electrical potential, which affects the transmembrane movement of many essential solutes. In this work, we investigate the main changes in renal responses to maintaining acid-base balance and show how they are interrelated with activating ATP-sensitive potassium channels.

The aim of the study was to study the indexes of renal acid regulation in acute hypoxia under the influence of adenosine triphosphate-sensitive potassium channels activator flocalin.

Material and methods. For this purpose, flocalin was administered intraventricularly to the non-linear white rats in the dose of 5 mg/kg under the conditions of acute hypoxia after subcutaneous injection of sodium nitrite at a dose of 50 mg/kg and intraperitoneal injection of 2,4-dinitrophenol at a dose of 3 mg/kg. The combination of such exotoxicants causes the development of combined histological hypoxia with the development of toxic kidney damage. (Filipets N.D., Gozhenko A.I., 2014). After 2 hours, diuresis was recorded, and the pH of urine was measured using a microbioanalyzer "Redelkys" (Hungary), the content of titrated acids and ammonium salts in urine - by the titration method. Indicators that characterized the acid-regulatory function of the kidneys were standardized by body weight and glomerular filtration, which was determined by the clearance of endogenous creatinine.

Results. Under conditions of acute hypoxia, the mechanisms of kidney regulation of the acid-base state were restored under the influence of flocalin. A decrease in the ammonium coefficient almost to the control value, as well as the pH indicator, indicates the stabilization of acidogenesis and ammonia genesis. The natriuretic effect of flocalin, established by us in previous studies, prevents the tubular reabsorption of sodium ions in exchange for the secretion of hydrogen ions into the lumen of the nephron, and the concentration of hydrogen ions in urine decreases to the control level. This is reflected in the reduced dynamics of excretion rates of free hydrogen ions and