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NATIONAL UNIVERSITY OF PHARMACY

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For a wide audience of scientists and pharmaceutical and medicinal employees.

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MODERN PHARMACOTHERAPY OF ERECTILE DYSFUNCTION

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Introduction. Erectile dysfunction (ED) is defined as a permanent inability to achieve and maintain an erection sufficient for intercourse. ED can disrupt physical and mental health and significantly affect the quality of life of patients and their partners. Epidemiological data have shown a high prevalence and incidence of ED worldwide. Most erectile dysfunction is related to vascular, neurologic, psychologic, and hormonal disorders; drug use can also be a cause. All studies demonstrate a strong association with age, even when data are adjusted for the confounding effects of other risk factors. Long-term predictions based on an aging population and an increase in risk factors (eg, hypertension, diabetes, vascular disease, pelvic and prostate surgery, benign prostatic hyperplasia, and lower urinary tract symptoms) suggest a large increase in the number of men with ED.

Aim. Study of modern standards of medical care for patients on ED.

Materials and methods. We conducted an analysis of articles, an adapted clinical guideline based on evidence, a unified clinical protocol providing medical care to patients with erectile dysfunction.

Results and discussion. Correction of lifestyle and risk factors should be carried out prior to the start of pharmacotherapy or in conjunction with its implementation. First-line treatment of ED is usually an oral phosphodiesterase inhibitor. Oral phosphodiesterase inhibitors selectively inhibit cyclic guanosine monophosphate (cGMP)-specific phosphodiesterase type 5 (PDE5), the predominant phosphodiesterase isomer in the penis. These drugs include sildenafil, vardenafil, avanafil, and tadalafil. Hormone replacement (androgens) may benefit men with severe hypogonadism and may be useful as adjunctive therapy when other treatments are unsuccessful by themselves. Meta-analyses suggest that the combination of testosterone and PDE5 inhibitors yields more effective results. If necessary, another noninvasive method, such as a vacuum erection device or intracavernosal or intraurethral (suppository) prostaglandin E₁ is tried next. Invasive treatments are used only when noninvasive methods fail.

Conclusion. Thus, we have studied and analyzed the current standards of medical care for patients with erectile dysfunction, according to which oral PDE5 inhibitor, androgens recommends; may be consider intracavernosal or intraurethral prostaglandin E₁ or use of a vacuum device; surgical implantation of a penile prosthesis is the final line of treatment.

MODERN PHARMACOTHERAPY OF VAGINITIS

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Introduction. The issue of preserving reproductive health of the population is one of the main strategies of the WHO. Infectious pathology has long been ranked first among other nosology in gynecology. This is the cause of many reproductive disorders of women, among which the most significant are infertility and miscarriage. Vaginitis leads in the structure of inflammatory diseases of the lower section of the genital tract. Vaginitis accounts for almost 70% of all gynecological diseases.

Aim. Study of modern standards of medical care for patients on vaginitis.

Materials and methods. We conducted an analysis of articles, an adapted clinical guideline based on evidence, a unified clinical protocol providing medical care to patients with vaginitis.

Results and discussion. The basis of most vaginitis is infection. There is also a small group of vaginitis of non-infectious origin, in which inflammatory processes in the vagina are provoked by allergic diseases or psycho-emotional disorders. The main microorganisms that cause vaginitis include Gardnerella, yeast-like fungi of the genus Candida, Trichomonas vaginalis. Pharmacotherapy of bacterial vaginitis caused by Gardnerella consists in the administration of antibacterial agents for systemic and topical

application, antiprotozoal agents of imidazole derivatives (metronidazole, tinidazole); antimicrobial agents for systemic and topical use in the group of linzamides (clindamycin); medications containing bifidobacteria and lactobacilli for local use. For pharmacotherapy of candidiasis vaginitis: antifungal agents for systemic use (fluconazole, itraconazole) and topical application (fluconazole, itraconazole, clotrimazole, miconazole); antimicrobial and antiseptic agents used in gynecology (butokonazole, terconazole, thioconazole); probiotics. For pharmacotherapy of trichomonadal vaginitis, antiprotozoal agents for imidazole (metronidazole, tinidazole) are prescribed for systemic and local antiprotozoal treatment.

Conclusion. Thus, we have studied and analyzed the current standards of medical care in the treatment of vaginitis. Modern pharmacotherapy for infectious vaginitis is to eliminate the etiological factor of the disease. The study of the processes occurring in non-specific infectious diseases of the vagina can form an integral picture of the problem, the solution of which are new approaches to the provision of obstetric and gynecological care and the individualization of therapeutic regimens.

PHARMACOTHERAPY OF CYSTIC FIBROSIS

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Introduction. Cystic fibrosis is a hereditary disease of the glands of external secretion, manifested primarily by pathology from the gastrointestinal tract and the respiratory system. The increased viscosity of secretion glands of external secretion leads to chronic inflammatory process in the lungs, exocrine pancreatic insufficiency, hepatobiliary pathology and abnormally high content of electrolytes in pot. Cystic fibrosis is the most common life-threatening genetic disease among the white population. In the United States, it is found in about 1/3 of the 300 Europoids born, 1/15 of the 300 African-Americans born and 1/32000 of the Asian-born Americans. The disease often manifests from infancy. Repeated or chronic infections of the respiratory tract manifest cough, phlegm, rales and are not specific. Cough is the most frequent complaint, cough accompanied by phlegm, nausea, vomiting and sleep disorders. Involving auxiliary breathing muscles into the act of breathing, barrel deformation of the chest, thickening of the terminal phalanges of the fingers and nail beds, cyanosis develop with the progression of the disease. Meconial obstruction due to obstruction of the ileum by viscous meconium may be an early pathognomonic trait and is present in 15-20% of patients with cystic fibrosis of newborns.

Aim. The purpose of our study was to study the pharmacotherapy of cystic fibrosis in international medical practice

Materials and methods. Treatment includes: comprehensive interdisciplinary support, antibiotics, aerosol preparations and physical techniques to improve secretion of secretion in distal airways, inhalation bronchodilators, in some cases, corticosteroids, as a rule, the addition of pancreatic enzymes, a high-calorie diet (sometimes requiring the use of food additives), CFTR-potential in patients with a specific mutation

Results and discussion. The goal of therapy is to maintain normal physical status, prevent or timely active treatment of pulmonary and other complications, encourage physical activity, and provide psychological support.

Conclusions. The course of the disease is largely determined by the degree of lung damage. Deterioration is inevitable, leading to exhaustion and ultimately to death, usually due to a combination of respiratory failure and pulmonary heart disease.

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Збірка містить матеріали науково-практичної конференції молодих учених та студентів «Актуальні питання створення нових лікарських засобів». Матеріали згруповано за провідними напрямками науково-дослідної та навчальної роботи Національного фармацевтичного університету. Розглянуто теоретичні та практичні аспекти синтезу біологічно-активних сполук і створення на їх основі лікарських субстанцій; стандартизації ліків, фармацевтичного та хіміко-технологічного аналізу; вивчення рослинної сировини та створення фітопрепаратів; сучасної технології ліків та екстемпоральної рецептури; біотехнології у фармації; досягнень сучасної фармацевтичної мікробіології та імунології; доклінічних досліджень нових лікарських засобів; фармацевтичної опіки рецептурних та безрецептурних лікарських препаратів; доказової медицини; сучасної фармакотерапії, соціально-економічних досліджень у фармації, маркетингового менеджменту та фармакоекономіки на етапах створення, реалізації та використання лікарських засобів; управління якістю у галузі створення, виробництва і обігу лікарських засобів; інформаційних технологій у фармації та медицині; основ педагогіки та психології; суспільствознавства; філології. Також у збірці опубліковані матеріали учасників Всеукраїнського конкурсу студентських наукових робіт зі спеціальності «Фармація, промислова фармація»

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