

Висновки. Отже, можна зробити висновок, що одним з важливих напрямів приведення екологічної відповідальності фармацевтичних організацій України до міжнародних стандартів є переорієнтація її на відновлення навколишнього природного середовища.

ANALYSIS OF THE ASSORTMENT OF DRUGS FOR THE TREATMENT OF ATHEROSCLEROSIS AVAILABLE ON THE PHARMACEUTICAL MARKET OF UKRAINE

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Introduction. Cardiovascular diseases (CVD) are the leading cause of mortality among citizens of Ukraine. By this indicator, our country remains one of the global leaders. The most common form of CVD is atherosclerosis of the blood vessels, which is responsible for the development of ischemic heart disease (IHD) in 95% of cases. Atherosclerosis is a condition of the arteries characterized by the deposition of cholesterol plaques on their inner walls, which over time can lead to partial or complete narrowing of the vessels and impaired blood circulation.

According to WHO statistics, men aged 30 are more vulnerable to this disease. This indicates that the onset of the disease is occurring at a younger age and is increasingly affecting younger generations. The main risk factors for the development of atherosclerosis include hypercholesterolemia. High concentrations of low-density lipoprotein cholesterol (LDL) in the blood are the primary cause of the pathogenesis of this disease, contributing to its progression. It is worth noting that dyslipidemic disorders, combined with elevated blood pressure, lead to increased levels of LDL and hypertriglyceridemia.

As of today, the drugs of choice for treating atherosclerosis include inhibitors of HMG-CoA reductase (statins), fibrates, bile acid sequestrants, and other hypolipidemic agents. When prescribing a medication, doctors typically rely on international clinical protocols, but Ukrainian therapy must also be taken into account. Considering the above, research into the market of medicinal products used in the therapy of atherosclerosis becomes particularly important.

The **aim** of the study is to investigate the state of pharmaceutical care for patients with atherosclerosis in Ukraine. To achieve this, it was necessary to analyze the group of hypolipidemic medicinal products available on the pharmaceutical market of Ukraine.

Materials and methods.

The analysis of the assortment of drugs available on the domestic pharmaceutical market was conducted according to the State Register of Medicinal Products and the Register of Medicinal Products subject to reimbursement as of May 1, 2024. The composition of the drugs was analyzed by their international non-

proprietary names (INNs) represented in the «Accessible Medicines» program. The analysis of the current assortment of hypolipidemic medicinal products available on the domestic pharmaceutical market was conducted using the ATC classification system. According to the ATC classification, the following group was analyzed: C10 lipid-modifying agents.

The information obtained was analyzed using analytical-comparative, systemic, logical, graphical, and mathematical-statistical methods.

Results of the study and discussion.

According to the data from the State Register of Medicinal Products as of May 1, 2024, there are 210 medicinal products registered in Ukraine belonging to the C10 lipid-modifying agents. Among these, statins constitute the largest proportion at 81,40%, followed by combination products at 15,12%, other hypolipidemic agents at 1,94%, other drugs at 0,78%, and bile acid sequestrants and fibrates each at 0,39% of the total assortment.

On the pharmaceutical market of Ukraine, the assortment of hypolipidemic medicinal products consists of 29,84% products from Ukrainian manufacturers. The distribution of foreign-produced drugs is as follows: Slovenia 16,67%, India 13,18%, the United Kingdom 6,59%, the Republic of North Macedonia and Poland 4,26% each, Hungary 3,88%, Cyprus 3,10%, Turkey 2,71%, Germany 2,33%, Malta and France 1,94% each, the USA and Canada 1,55% each, Georgia, Ireland, Spain, and Switzerland 1,16% each, Romania and the Czech Republic 0,78% each.

With the aim of improving access to medicinal products for the population of Ukraine, the «Accessible Medicines» program was formed, under which patients can obtain these drugs for free or with a minimal co-payment. It has been established that the «Accessible Medicines» program includes 1 medicinal product from the subgroup of HMG-CoA reductase inhibitors (statins), registered under the international non-proprietary name simvastatin. Thirteen trade names are included in this program, presented in the form of film-coated tablets. An analysis of this subgroup yielded the following results: rosuvastatin based drugs constitute the largest proportion at 53,33%, followed by atorvastatin at 33,33%, simvastatin at 11,90% and pitavastatin at 1,43%.

The distribution of the subgroup of HMG-CoA reductase inhibitors by country of manufacture was studied. It was found that 31,43% are manufactured in Ukraine, while the majority is produced abroad (68,57%), distributed among the following countries: India 15,71%, Slovenia 14,29%, the United Kingdom 7,14%, Poland and the Republic of North Macedonia 5,24% each, Cyprus 3,81%, Hungary and Turkey 3,33% each, the USA 1,90%, Canada, Ireland, Switzerland and Georgia 1,43% each, Malta, Germany and Romania 0,95% each.

To enhance the therapeutic effect in the treatment of atherosclerosis, it is advisable to use combination medicinal products. Since the composition of these medications includes multiple active pharmaceutical ingredients, the pharmacological effect occurs more rapidly due to the manifestation of different mechanisms of action on the atherosclerotic process. However, it should be remembered that the use of combination agents in the basic therapy of atherosclerosis should be prescribed on the recommendation of a doctor

individually, so initially, diagnostic testing for atherosclerosis is necessary to determine its stage of development, the presence of concomitant diseases, and other factors that may be included in the selection of the optimal treatment regimen.

After analyzing the pharmaceutical market of Ukraine, we found that the country has registered 16 combination drugs, accounting for 15,12% of the total assortment. The market is predominantly represented by combinations of rosuvastatin with ezetimibe (28,21%) and rosuvastatin with acetylsalicylic acid (20,51%). Pharmaceutical manufacturers also offer medications containing combinations such as atorvastatin, amlodipine and perindopril (12,82%), rosuvastatin, perindopril and indapamide (10,26%), rosuvastatin with valsartan (10,26%), atorvastatin, acetylsalicylic acid and ramipril (7,69%) and atorvastatin with ezetimibe and atorvastatin with amlodipine, each constituting 5,13%.

It was found that the share of medicinal products manufactured by domestic producers is 23,08%. Among foreign manufacturers, the largest share is accounted for by Slovenia 33,33%, France 12,82%, Spain 7,69%, the United Kingdom, Hungary, Malta and the Czech Republic each at 5,13%. The lowest number of products is manufactured by Germany, accounting for 2,56% of the analyzed subgroup.

It was established that medicinal products of the C10A group significantly differ in dosage form. On the pharmaceutical market of Ukraine, hypolipidemic drugs are available in six pharmaceutical forms. The largest share is represented by film-coated tablets (91,41%), followed by hard capsules (5,08%), plain tablets (1,95%), soft capsules (0,78%), film-coated tablets, and oral suspension powder, each at 0,39%.

Conclusions. Thus, according to the results of the marketing research, it was established that the majority of medications are of foreign production. Monotherapy predominates, and the appropriateness of using combined therapy for cardiovascular diseases has also been established.

МЕТОДОЛОГІЯ РОЗРОБКИ ЛІКАРСЬКОГО ЗАСОБУ У ФОРМІ ТВЕРДОГО МИЛА

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Вступ. У сучасній дерматології актуальним є використання мила як лікувально-профілактичного засобу. Все частіше мила застосовують у комбінованій терапії себореї, псоріазу, екземи, дерматиту тощо. Все більш актуальним стає розроблення нових складів мила, зокрема твердого. Завдяки раціональному підбраному складу мильної основи мила можуть мати не лише відмінні очищувальні властивості, а й ефективно зволожувати і живити шкіру. Крім того, завдяки наявності у складі мильної основи і жирової, і водної фази, до складу мила можливе введення як жиророзчинних, так і водорозчинних лікарських речовин [2].