

histamine, methacholine, adenosine, and allergen. The mechanism of theophylline is the following: it inhibits the enzyme phosphodiesterase, which is responsible for hydrolysis of cyclic AMP in smooth muscle, possibly resulting in bronchodilation. It also binds to the adenosine receptor and thus blocking adenosine mediated bronchoconstriction (Talha N. Jilani, Charles V. Preuss, 2022).

Conclusion. The effectiveness of discussed drugs in management of bronchospasm depends on age and cooperation of patient, cooperation of the patient, applied technique.

ANALYSIS OF THE RANGE OF CALCIUM ANTAGONISTS ON THE PHARMACEUTICAL MARKET OF UKRAINE

Shchokina K.G., Zhudat Ikram, Belik H.V.

*National University of Pharmacy,
Pharmacology and pharmacotherapy department,
Kharkiv, Ukraine
acya@ukr.net*

Introduction. Arterial hypertension (AH) is one of the most common diseases. More than 1.5 billion people worldwide suffer from this disease. Arterial hypertension is a risk for the appearance in patients of coronary disease, myocardial infarction, development of heart failure, disorders of blood circulation in the brain. 50% of all mortality from cardiovascular diseases is caused by arterial hypertension.

The generally accepted point of view regarding hypertension is the recognition of the central role of calcium ions, the level of which in vascular smooth muscles increases significantly in this disease. This not only directly affects electromechanical coupling in these muscles, but also damages other cell membrane transport systems. One of the achievements of pharmacology and cardiology is the introduction into clinical practice in the 80s of the last century of calcium antagonists, which became the first choice in the treatment of hypertension.

Aim of the study: analyze the range of calcium antagonists registered in Ukraine as of March 2023.

Materials and methods. To analyze the assortment of calcium channel blockers registered in Ukraine, as of March 2023, the state register of medicinal products of Ukraine was used.

Results and discussion. The obtained results showed that the studied drugs registered in Ukraine according to the ATC classification belong to group C08 Calcium antagonists. As of March 2023, 9 international non-proprietary names (INNs) of calcium antagonists were registered on the pharmaceutical market of Ukraine, of which 7 INNs are dihydropyridine derivatives, 1 each is phenylalkylamine and benzothiazepine derivatives. There are 65 trade names of calcium channel blockers on the Ukrainian market. 59 of them are dihydropyridine derivatives. By the number of trade names, amlodipine drugs prevail – 38. 8 nifedipine drugs, lercanidipine – 6, nimodipine – 5, nitrendipine – 1, felodipine – 1 are registered. 4 verapamil trade names are registered, 2 - diltiazem. Among the registered calcium antagonists, 61.5% are

drugs of Ukrainian manufacturers, 38.5% are foreign drugs. The drugs are presented on the market in the form of 4 dosage forms: tablets, capsules, oral drops, solution for injections.

Conclusions. The range of calcium channel blockers on the modern pharmaceutical market of Ukraine is quite wide. Dihydropyridine derivatives predominate, namely, amlodipine drugs, predominate among the registered medicines of this group. However, there are only 6 drugs of phenylalkylamine and benzothiazepine derivatives. Tablets (tablets, coated tablets, prolonged-release tablets, modified-release tablets) are the most common medicinal form of calcium antagonists. Other medicinal forms are available only in certain drugs.

**AFFORDABLE DRUGS REIMBURSEMENT PROGRAM
FOR MEDICINAL PRODUCTS:
DRUGS FOR PARKINSON'S DISEASE TREATMENT**

Zhulai T., Bezugla N., Otrishko I., Prystupa Ye.

National University of Pharmacy

Kharkiv, Ukraine

tszhulay2910@gmail.com

Introduction. Parkinson's disease (PD) is a progressive neurodegenerative disorder that predominantly affects the elderly. PD patients have both motor and non-motor symptoms (tremors at rest, rigidity, bradykinesia, and stooping). PD can also be associated with neurobehavioral disorders (depression and anxiety), cognitive impairment (dementia), and autonomic dysfunction (orthostasis and hyperhidrosis). Medical treatment of PD patients is challenging, as the choice of drugs is limited. Virtually all patients with PD undergo dopamine replacement therapy using levodopa (LD) during the course of the disease's progression. However, despite the fact that LD is the «gold standard» in PD treatments and has the ability to significantly alleviate PD symptoms, it comes with side effects in advanced PD. LD replacement therapy remains the current clinical treatment of choice for Parkinson's patients, but approximately 80% of the treated Parkinson's disease patients develop levodopa-induced dyskinesia in the advanced stages of the disease

PD treatment is life-long, requiring long-term and continuous therapy with periodic adjustments of the dose and intervals of taking medicines to improve the patient's quality of life. Since April 1, 2019, The National Health Service of Ukraine has administered the Affordable Drugs reimbursement program for medicinal products. To reduce the financial burden, as one of the elements of compliance, the pharmacist has to understand the principles of choosing the trade name of a fixed combination of levodopa-carbidopa immediate release (LD-CD IR), which is registered on the pharmaceutical market of Ukraine, based on the neurologist recommendations, taking into account the patient's capabilities.

Aim of the study. Conduct a comparative analysis of medicines containing a fixed combination of LD-CD IR, which are included in the Drugs Register of