**Introduction.** HIV produces a chronic, progressive and irreversible infection, altering the host defense mechanisms, installing AIDS and opportunistic infections, with invariable progression to death, in absence of treatment. HIV infection rapidly affects young and fertile people, who are receptive to injectable drugs use, and practicing unprotected sexual intercourse that favors the spread of the epidemic. AIDS is a global epidemic with about 40 million infected people. Twenty million people have died since the early 1980s because of AIDS-related complications. Every ten seconds, in the world, a person dies of AIDS. According to WHO, the most common cause of women's mortality worldwide is AIDS. 50% of newly infected people are aged between 15 and 25 years. At the end of 2016, 11.043 HIV-infected were registered in Moldova, and during the first nine months of 2017, 614 patients were newly diagnosed. The estimated number of all bearers is about 15 thousand citizens of Moldova.

Case report. Patient M., 31 years, driver, was hospitalized with the diagnosis of HIV and many coinfections: chronic viral hepatitis B, toxic hepatitis, ascites, chronic pancreatitis, and chronic cholecystitis. Clinical picture: general weakness, periodic pronounced pain in the right side of abdomen, loss of appetite, nausea, and asthenia. Period of hospitalization: 27 days. The diagnosis was confirmed in 2009, the route of infection was sexual, but the patient also used injectable drugs. During the hospitalization he received antiretroviral treatment: Darunavir 600 mg once a day, Ritonavir 600 mg twice a day, Tenofovir + Lamivudine 1x1, and symptomatic: Mezym, Verospiron, Panangin, Furosemide, Hepasol, Sorbilact, Infusol, Hemodez, Lipesol, Arginine. The patient was discharged with the recommendation to be under the supervision of the infectious disease doctor, and to continue the antiretroviral and symptomatic treatment, repeated control over 3 months.

**Conclusions.** HIV / AIDS is a chronic, lifelong disease without known healing, and infected people have to be medically monitored for the rest of their lives. Antiretroviral therapy aims to prolong lifetime duration and improve the quality of life of patients.

**Key words:** HIV, coinfections, antiretroviral treatment, symptomatic treatment

## DEPARTMENT OF PHARMACEUTICAL AND TOXICOLOGICAL CHEMISTRY

## 354. EVALUATION OF COMBINED PHARMACEUTICAL MEDICINES USED IN HYPOPOTASSEMIA

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**Introduction.** The fixed dose combined pharmaceutical medicine represent an association of two or more drug substances, using in several branches, including the hypopotassemia treatment (potassium concentration in the blood plasma is below 3.5 mmol/l). For example: Panangin, Asparcam, Antikircel. The single-component therapy with potassium chloride, potassium iodide or other potassium salts ensures the essential pharmaco-therapeutic in up to 50% of the medical treatment cases, therefore it is less effective, than using of combined pharmaceutical medicine, that shows better results in hypopotassemia. In particular, those combinations of pharmaceutical substances are plausible which achieve not only the removal of the hypopotassemia symptoms (cramps, cardiac arrhythmias), but also the causal treatment.

**Aim of the study.** Evaluation of the combined pharmaceutical products market used in hypopotassemia in the Republic of Moldova (RM).

**Materials and methods.** The analysis of the pharmaceutical market of RM, the study of the State Nomenclature of Medicines.

**Results.** As a result of the detailed analysis of the pharmaceutical market in the RM it was determined that the basic producters of the combined medicines, using in the treatment of hypopotassemia, are Romania - 42%, Ukraine - 21%, Russia - 17%, Germany - 9%, US - 6 %, Hungary - 5%. Unfortunately, the monocomponent potasium medicines predominate (70%) on the pharmaceutical market of the RM, which provides only a daily dose of this electrolyte. There is not any native combined medicine in RM. Basing on this fact, it is proposed to elaborate a new combined pharmaceutical product containing potassium aspartate, magnesium aspartate, potassium orotate and spironolactone, which will be able to ensure adequate causal treatment in hypopotassemia due to stopping of the potassium losses (renal or extrarenal) and regulation of metabolic disorders, which generates the normalization of potassium potential in cells.

**Conclusions.** The actuality and usefulness have demonstrated the necessary of the research initiating to elaborate the native combined pharmaceutical product, which would be accessible, effective, convenient and low in toxicity

**Key words:** hypopotassemia, combined product, pharmaceutical market

## DEPARTMENT OF DRUGS TECHNOLOGY

## 355. PREPARATION OF SUPPOSITORIES WITH PROPOLIS EXTRACT

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**Introduction.** Propolis is known as one of natural products with multiple therapeutic effects, such as: antimicrobial, antibiotic, anti-inflammatory, analgesic, antioxidant, antifungal and antitumor. This apiculture product has a very complex composition, consisting of the following groups of active principles: phenols, flavonoids, amino acids, volatile oils, steroids, minerals, etc. The development of pharmaceutical forms with propolis extract is a very actual problem.

**Aim of the study.** Technology development and standardization of suppositories with soft propolis extract.

**Materials and methods.** Analysis of State Nomenclature of drugs of the Republic of Moldova. Use of hand rolling and molding methods and different excipients to prepare suppositories with propolis extract.

**Results.** The analysis of State Nomenclature of drugs of the Republic of Moldova denotes a very low content of preparations with soft extract of propolis. Most of the suppositories have anti-inflammatory action (25%); followed by analgesic-antipyretic (15%); immunomodulators (14%), etc.

Suppositories with soft propolis extract were formulated in the compounding department of Vasile Procopisin Pharmaceutical University Center. The excipients used were cocoa butter, PEG 4000:400 (9:1) and PEG 4000:1500:400 (6:3:1). The performed quality tests on appearance, melting rate, dissolution rate and uniformity of mass met the quality standards required by European Pharmacopoeia.

**Conclusions.** The technology of preparation of suppositories with soft propolis extract by two methods, using different excipients was elaborated and quality assessment was performed. The results of the research will allow the introduction of suppositories with soft propolis extract in assortment of Vasile Procopisin Pharmaceutical University Center as elaborations.

**Key words:** propolis, suppositories, extract