Results and discussion. Improvement of ointments technology and their quality is carried out in such directions as: increase of chemical, physical, microbiological stability of bases and ointments; development of accessible and objective methods for assessing the quality of ointments; improvement of packaging; development and implementation of elements of minor mechanization in the preparation of ointments in pharmacies; expansion of the range and unification of the formulation of ointments and pastes.

In the first ointment, it was necessary to prevent contact between the molecules of the acid of salicylic and zinc oxide. Therefore, we considered it possible for them to be separately dispersed and further mixed for the preparation of a drug. In the second ointment we grinded up salicylic acid in a mortar according to Deryagin's rule with a small amount of sunflower oil. After that, the rest of the oil was gradually added and lanolin anhydrous was added in several steps. By this order of mixing, we created a single lipophilic phase of the ointment base. After thorough homogenization, the purified water was gradually added. In the third case, stable ointment emulsions were obtained by stabilizing them with a 5 % solution of methylcellulose or Tween-80.

Conclusions. The technology of multicomponent ointments with salicylic acid is experimentally proved taking into account the physical and chemical properties of the ingredients included in their composition. The stability of the prepared preparations during storage was determined.

DEVELOPMENT OF REGULATORY DOCUMENTATION FOR INTRAPHARMACEUTICAL PRODUCT SOLUTION OF RIBOFLAVIN

Volkogon A. A., Uidani Basam, El Huadi Hind
Scientific supervisor: assoc. prof. Bogutska O. Ye.
National University of Pharmacy, Kharkov, Ukraine
bogutskaya2016@gmail.com

Introduction. The growth of the number of pharmacies in Ukraine contributes to the emergence of fierce competition in the pharmaceutical market for providing patients with the necessary medicines. Many pharmacies are interested in improving the quality of patient care. Nowadays, the number of pharmacies that make medicines according to individual prescriptions increases in Ukraine. For example, in Kharkov, there are pharmacy chains such as Leda, Prana, 195, 200 and others. To meet consumer demand, many manufacturing pharmacies prepare extemporal drugs in reserve. In the pharmacies of this category the nomenclature of intra-pharmaceutical products has expanded. To accelerate the process of manufacturing extemporal drugs in pharmacies, a number of concentrated solutions, semifinished products, ointment bases and other intra-pharmaceutical products are prepared, which significantly shorten the time for compounding of medicines.

But at the same time pharmacies face certain difficulties, such as the presence on the market of active pharmaceutical ingredients (substances) and auxiliary substances, the range of which leaves much to be desired. Problems exist in the pricing of extemporal medicines, which are associated with the profit of pharmacies. But no less important and unsolved problem is the availability of a regulatory framework for the manufacture of extemporal drugs and intra-pharmaceutical products.

For each extemporal medicinal product or intra-pharmaceutical product prepared for stock, it is necessary to have the normative documentation in the drugstore.

Aim. The Department of Pharmaceutical Technology of Drugs provides assistance to manufacturing pharmacies in the development of this documentation. One such work was the development of a technological instruction for the intra-pharmaceutical product : a solution of riboflavin 0.02% and the selection of methods for its analysis in pharmacies.

Materials and methods. To develop the technological instruction for a solution of riboflavin 0.02%, there were used materials described in the monograph “Riboflavin”" and “Purified Water”, as well as requirements for intra-pharmaceutical products, and the standards of the Ministry of Health of Ukraine 42-4.5:20015 and 42-4.6:20015, which regulate the preparation of extemporal medicinal products in Ukraine.

Results and discussion. The developed regulatory documentation for a solution of riboflavin 0,02% includes the following sections: production formulation, requirements for APhI and purified water,

description of sanitary-hygienic requirements for preparation of production, technological process, quality control of finished products, labeling and packaging of intra-pharmaceutical product, and its shelf life and storage conditions.

Riboflavin solution should be made in a pharmacy under aseptic conditions, for this it is necessary to have an aseptic or laminar block. The technology is as follows: the sample of riboflavin is dissolved in a flask made of heat-resistant glass in water purified by heating. After dissolution, the resulting solution is adjusted to the required volume with a solvent. Identification of the active substance and quantitative analysis of the resulting solution is carried out by spectrophotometric analysis. We chose this method, because it is a pharmacopoeial.

Conclusion: The regulatory documentation for the intra-pharmaceutical product of the riboflavin solution 0.02% is developed. Methods for its identification and qualitative analysis are proposed. The results of the work done are of practical importance for production pharmacies. Their introduction will allow providing ophthalmic patients with cheap and effective medicinal product – vitamin eye drops, which contain riboflavin, and the deficit of which is observed in the pharmaceutical market of Ukraine.

DEVELOPMENT OF COMPOSITION AND TECHNOLOGY OF EXTEMPORANEOUS OINTMENT FOR TREATMENT OF ALLERGIC RINITIS

Vysotska L. V.
Scientific supervisor: assoc. prof. Azarenko Yu. M.
National University of Pharmacy, Kharkiv, Ukraine
outland2006@gmail.com

Introduction. In recent decades, allergic reactions in the population are very widespread. According to various statistics, from 8 to 25% of the inhabitants of the planet suffer from various forms of allergy. As for the frequency of allergic rhinitis, it is growing, apparently, the fastest. Even there is a forecast that by the middle of the 21st century this pathology will be the most common among humanity.

Allergic rhinitis is an inflammatory defeat of the mucous membranes of the nose resulting from an allergic reaction. Along with bronchial asthma and atopic dermatitis, he is included in the «big three» of major allergic diseases.

The most important symptom of allergic rhinitis is the aqueous clear separation of the nasal cavity in different amounts. The allergic reaction after contact with the stimulus in different people occurs at different times: in some patients, an allergic reaction occurs after 5-10 minutes after contact with the allergen, at most for several hours. In others, from the moment of contact with the stimulus until the appearance of an allergic reaction can take up to 10 days.

Aim. Theoretical and experimental studies on the development of ointment composition and technology for the treatment of allergic rhinitis.

Materials and methods. In developing the composition of the extemporaneous ointment for the symptomatic treatment of allergic rhinitis, the following active pharmaceutical ingredients were used: dexamethosone, adrenaline hydrochloride, calcium gluconate. As auxiliary substances peanut oil, wax emulsion n1 Polawax, emulsion wax Steareth-21, water purified were selected.

Results and discussion. Treatment for allergic rhinitis should be comprehensive and systemic and should include different directions and means.

Drugs for the symptomatic treatment of rhinitis are available in various dosage forms, each of which has its own characteristics that determine the choice of drug for a particular patient.

The use of modern extemporaneous drugs for local therapy of manifestations of allergic rhinitis can reduce the timing of systemic treatment, avoid the development of side effects, significantly reduce the cost of expensive antihistamines preparations of industrial production.

For the treatment of this pathology, it is advisable to use drugs that combine active pharmaceutical ingredients of different orientations, so they have a complex effect. When developing the composition of the extemporneousl ointment we were guided precisely by this principle when choosing the active substances.

Glucocorticoid hormone dexamethasone has a pronounced anti-inflammatory and anti-allergic