413. DETERMINATION OF METRONIDAZOLE AND MICONAZOLE NITRATE IN A MIXTURE BY SPECTROPHOTOMETRIC METHOD

Author: Luca Damaschin

Scientific adviser: Valica Vladimir, PhD, Professor, Department of Pharmaceutical and Toxicological Chemistry, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Metronidazole and miconazole nitrate are substances with antiprotozoal, antifungal and antibacterial contents. For quality control of these drugs, in particular, quantitative determination, the European Pharmacopoeia recommends the HPLC method.

Aim of the study. Development of an express method for the quantitative determination of a mixture of metronidazole and miconazal nitrate based on the spectrophotometric method.

Materials and methods. In the work was used an Agilent 8453 single-beam spectrophotometer from Hewlett Packard, USA. As standard (control) substances, the pharmaceutical substances metronidazole and miconazole were used, the content of the main substance in which was not lower than 98%.

Results. The dependence of the absorption intensity in the ultraviolet (200-400 nm) and visible (400-760 nm) spectral regions in various solvents was studied.

Conclusions. The obtained spectra demonstrated the possibility of analysis of the studied substances in the joint presence.

Key words: Metronidazole, miconazole nitrate, spectrophotometer.

DEPARTMENT OF DRUGS TECHNOLOGY

414. THE LEGAL SUPPORT OF QUALITY OF TECHNOLOGICAL PROCESSES IN THE PHARMACEUTICAL INDUSTRY OF THE REPUBLIC OF MOLDOVA

Author: Diana Antonovici

Scientific adviser: Znagovan Alexandru, PhD, Associate Professor, Department of Drug Technology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Of particular importance in ensuring the quality of technological processes and medicinal products is the legal support - all the legal acts and norms adopted in the vision of promoting and ensuring quality at all stages of production and distribution. According to ISO, quality requires all the performances and characteristics of a product or a care service determined by the ability to have a direct or implicit consumer satisfaction. The legal regulation of the quality of the technological processes in the pharmaceutical companies ensures the correspondence of the composition indicated on the label with the real one, by observing all the legal norms in force regarding: a. creation of the internal management system (ISO 9001); b. optimization of drug manufacturing (GMP); c. creation of the pharmaceutical quality system (ICH Q).

Aim of the study. The aim is to raise awareness of the correct understanding of the concept of quality, to support the implementation of the quality management systems of technological processes.

Materials and methods. As bibliographic sources served the Internet, the official data presented by amed.md. The research methodology used: analytical, statistical, comparison, etc.

Results. The European legal regulations in the field studied represent respectively the standards of the ISO 9000 series, as well as the guides regarding their application in the ISO 10000 series (ISO 10006, for project management, ISO 10007 for management configuration, ISO 10013 for quality documentation, ISO / TR 10014 for quality economic efficiency management, audit and training standards). The quality management system of a pharmaceutical company is directly influenced by the national legal regulations, its objectives, by the pharmaceutical products delivered to the market and by its specific practices; as a result, quality systems vary from company to company. In the Republic of Moldova in 2013 the Order of the Ministry of Health, Labor and Social Protection, Nr. 309 of 26.03.2013 regarding the approval of the Rules of good manufacturing practice of medicines (GMP) for human use. In 1994, within the resolution on industrial competitiveness for the European Union, the Council of Ministers of the U.E. approved the initiative on the elaboration of a European quality promotion policy. On 01.01.2019 GMP certified 7 drug manufacturers in the Republic of Moldova.

Conclusions. Due to the fact that there can be a mutual conditioning between the health of the citizens and the quality of the processes in the production of medicines and services, the state cannot remain indifferent to the way in which the problems of the quality of the products and services are solved, whether their realization is done in the private or state sector.

Key words: Quality, legal support, technological process.

415. THE ROLE OF APICLE PRODUCTS IN OINTMENTS FORMULATION

Author: Olesea Secu

Scientific adviser: Guranda Diana, Dr. pharm., Associate Professor, Department of Drug Technology, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Now Propolis-containing preparations are widely used in medical practice, due to their bactericidal, antiviral, antifungal, anti-inflammatory, analgesic, regenerative, antioxidant properties. Propolis is a natural preparation, the most powerful anti-infectious drug known, which destroy 21 bacteria, 9 species of parasitic fungi, 30 types of viruses (including their varieties). The development of new pharmaceutical forms containing propolis for the treatment of dermatological diseases is an important research direction in the health branch for Republic of Moldova. According to data estimated by WHO, the prevalence of skin diseases remains a current problem due to the rather high statistical index.

Aim of the study. The formulation and efficacy of the preparations with propolis extract in the treatment of skin diseases for adults and children. Completing the information level questionnaires of the population on the efficacy of bee products in medicine.

Materials and methods. Synthesis and study of the data of the specialized scientific literature, the results of the population interview, as well as the documentation with magistral prescriptions of the University Pharmaceutical Center (CFU) "Vasile Procopisin".

Results. Propolis is called a "cocktail" of healing substances, gathered from the buds and from the bark of poplars, of birch trees, chestnuts, willows, ash trees, blueberries and some species of fruit trees. In CFU "Vasile Procopisin" ointments were made with propolis extract based on different excipients: Vaseline, lanolin, polyethylene glycols. The pharmaceutical factors that influence the kinetics of the release of the active substance from excipients were analyzed. Population questioning (30 questionnaires) demonstrated the use and efficiency of propolis extract preparations in the treatment of skin diseases and other diseases, as well as a high degree of