INTERNATIONAL E-CONFERENCE

THE JOINT INTERNATIONAL PHARMACY SYMPOSIUM "CONTEMPORARY PHARMACY: ISSUES CHALLENGES AND EXPECTATIONS 2021" AND "11TH CONFERENCE: PHARMACY SCIENCE AND PRACTICE"

CPICE-PSP 2021

ABSTRACT BOOK

Organized by Faculty of Pharmacy, Lithuanian University of Health Sciences

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The Joint International Pharmacy Symposium "Contemporary Pharmacy: Issues Challenges and Expectations 2021" and "11th Conference: Pharmacy Science and Practice"

CPICE-PSP 2021

The Conference is dedicated to Pharmacist Role during COVID-19 pandemic situation.

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Language of abstracts was not corrected.

WELCOME

Dear Participants and Guests of the Conference,

It is my great pleasure to welcome you to the on-line Joint International Pharmacy Symposium organized by Lithuanian University of Health Sciences, Faculty of Pharmacy. The Joint Symposium „Contemporary Pharmacy: Issues Challenges and Expectations 2021" and „11th Conference Pharmacy Science and Practice" is dedicated to Pharmacist Role during COVID- 19 pandemic situation. The Covid-19 pandemic has changed our lives in habits, health, relationships and plans for the future. All over the world pharmacists are standing up to the challenge of COVID-19. As the COVID-19 pandemic limited health systems, pharmacy professionals have shown themselves to be an integral part of them. Community pharmacists have supported government initiatives to control the pandemic and have ensured patients continued to receive their medicines. Pharmaceutical scientists have been involved in finding effective vaccines and identifying effective treatments. The pharmacy profession has been demonstrating expertise, strength, courage and dedication to care at the highest level. Today we meet to share best pharmacy practice, innovation and problems so that we can solve them together – as pharmacists, pharmacy educators, researchers and pharmacy students.

On behalf of the organizing and scientific committee,
Prof. Ramune Morkuniene
Dean of the Faculty of Pharmacy
Lithuanian University of Health Sciences

Content

ABSTRACTS

PhD STUDENTS SECTION

Integrated Research of Suppositories with Diosmin and Hesperidin

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Introduction: Hemorrhoids is a serious pathological change in the anorectal area, which every year increases the prevalence among the working-age population of the country. For the treatment of acute and chronic forms of this disease, it is important to develop a complex drug that will act directly at the site of the pathology. The aim of our work was integrated study of rectal suppositories with diosmin and hesperidin using technological, analytical, pharmacological researches.

Materials and methods: The subjects of the study were samples of suppositories with a quantitative content of the fraction of diosmin and hesperidin in 150, 300 and 500 mg. The technological properties of the samples were studied in terms of adhesion and hardness (TA.XTExpressC); melting point (Erweka SSP, method 2.2.15 "Melting point - open tube capillary method" SPhU), disintegration time (Erweka ST 32, method 2.9.2 "Disintegration test of suppositories and pessaries" EPh). The release profile of active substances from the samples was studied (Erweka DT light series, 0.1M phosphate buffer with pH 7.3 as dissolution medium) and in parallel compared with the quantitative content of diosmin and hesperidin in suppositories from spectrophotometric method (Specord 200 Plus). Study of micropreparations of rat rectal mucosa were performed under a light microscope Granum L30. Tissue fragments for the study were fixed in 10% formaldehyde solution.

Results: According to the results of technological and analytical research, it was found that all samples meet the established standards. The results of the study of the release profile showed that within 45 minutes the best indicators has a sample with the content of active components of 300 mg (99.8%), and in samples with 150 and 500 mg diosmin and hesperidin fraction the release is less than 95%. The results of the study of the mucous membrane of mice showed a significant decrease in inflammation after application of a sample containing 300 mg of diosmin and hesperidin.

Conclusions: It was established that the optimal technological, analytical and pharmacological parameters have a sample with a diosmin and hesperidin content of 300 mg.

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