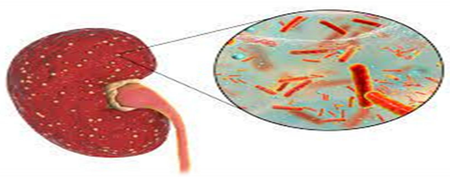
USMF „NICOLAE TESTEMIȚANU"
CONFERINȚA ȘTIINȚIFICĂ ANUALĂ
CERCETAREA ÎN BIOMEDICINĂ ȘI SĂNĂTATE: CALITATE, EXCELENȚĂ ȘI PERFORMANȚĂ
2022 octombrie 2021

OPTIMISATION OF MAGISTRAL SEMI-SOLID FORMS USED IN UROGENITAL DISEASES

Guranda Diana[1], Ciobanu Cristina[1], Ciobanu Nicolae[1], Solonari Rodica[1,2]
[1]Department of Drug Technology, "Nicolae Testemitanu" SUMPh,
[2]"Vasile Procopisin" University Pharmaceutical Center

Introduction

Urinary tract infections are the most common urogenital diseases, with an increased incidence in women and the elderly. Urogenital infections are caused by Gram-negative germs, in which *E. coli* predominates with a share of 85-90%.



Keywords

suppositories, furagin, stability studies

Purpose

Research of the optimized preparation technology of magistral suppositories by comparative evaluation of their quality parameters.

Material and methods

Suppositories were prepared based on hydrophobic and hydrophilic excipients, the dosing was performed spectrophotometric UV-VIS on a Perkin Elmer-40 spectrophotometer, solvents and reagents had the degree of purity "pure for analysis" and "chemically pure".

Results

In the "Vasile Procopisin" University Pharmaceutical Center, suppositories were prepared with furagin, dimexid, anestesin, methylene blue on cocoa butter excipient (manual modeling method, fig.1) and on hydrophilic excipients PEG 400: PEG 4000, (by melting and molding method). Both types of suppositories were subjected to quality tests, including their stability at temperature, humidity, UV irradiation, the quantitative determinations were performed by UV-VIS spectrophotometric method (fig.2). On the spectra there were no maxima corresponding to the degradation products that overlap with the maxima of the active substances, the UV stress does not cause a major degradation of the furagin.

Fig.1. Furagine suppositories prepared by manual modeling

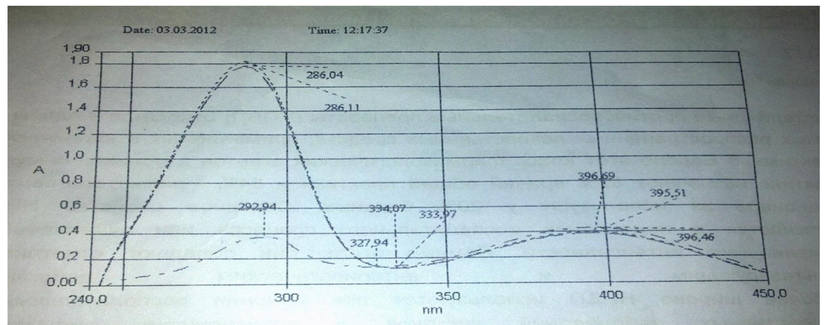


Fig.2. Spectra of absorption of standard, sample solutions of furagine and blank solution.

Conclusions

The suppositories were kept for 4 months at a temperature of +3 + 5˚C in the refrigerator, not changing in terms of quantity and keeping its original shape and appearance.
Suppositories with furagin and other active components were prepared by technological methods. The results obtained performing the UV-VIS spectrophotometric analysis were subsequently used for the stability studies of the researched forms.