

Abstract

The analysis of extemporaneously compounded prescriptions in the pharmacy of the Hospital České Budějovice

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Introduction: However the preparation of extemporaneously compounded medicines is no longer the main activity in the pharmacy, it is still an inseparable part of the pharmaceutical profession. The preparation is constantly evolving, therefore it is essential to monitor its status to predict its future evolution.

Objectives: The objective of the thesis was to review a status of prescription of extemporaneously compounded medicines from different points of view. Primarily to verify an assumption, that number of these prescriptions is decreasing, to define specializations of prescribing physicians, to define different dosage forms and their proportion of prescriptions and to define the influence of stoppage of drugs manufactured in factories on the preparation of extemporaneously compounded medicines.

Methods: The evaluated file was formed by prescriptions gathered in the pharmacy of the Hospital České Budějovice between years 2015 and 2016. The prescriptions were separated to several groups according to the origin of the prescription (from the hospital or not), the type of prescription (from human physician or veterinary doctor), the dosage form, the way of preparation (in the sterile environment or not), the way of application (oral, rectal, nasal, vaginal, etc.), the formula, the substance and the physician's specialization. Furthermore the prescribing physicians were reviewed according to the year of their graduation.

Results: In monitored file from the year 2016 extemporaneously compounded medicines comprised 5,16 %. That meant a mild increase in the comparison with the

year 2015 (4,8%). On the contrary, VZP showed a decrease in the same period of time and the proportion of extemporaneously compounded medicines was 3,38 % in the 2016. The most prescribed dosage forms were semi-solid (49,54 %), followed by liquid (30,23 %) and solid (20,23 %). The most active physicians were dermatologists (46,14 %), general practitioners (11,47 %) and pediatricists (10,24 %). The stoppages of drugs manufactured in factories have a major influence on prescription of extemporaneously compounded medicines. The most prepared solid dosage form were suppositories with prednisone, which served as an alternative to the medicinal product not available on the market in that period of time.

Conclusion: The file showed the increase in studied period of time. Although the data received from VZP shows progressing decrease of the number of extemporaneously compounded medicines. It cannot be said with absolute certainty, that the amount of preparation in the pharmacy will also decrease in the future. Nevertheless the preparation of the medicinal product should not disappear from pharmacies, because it still plays an irreplaceable role in obtaining suitable treatment.