Abstract

Drug interactions of cardiovascular drugs and their analysis in the patients of community pharmacy II.

Author: Lenka Skořepová¹

Tutor: PharmDr. Josef Malý, Ph.D.¹

¹Department of Social and Clinical Pharmacy, Charles university in Prague, Faculty of Pharmacy in Hradec Králové

Introduction: Drug interactions are a major cause of toxicity, side effects of drugs and increase the risk of harm to the patient. The pharmacist has an indispensable role in the process of minimizing risks and resolving of drug interactions.

Objectives: The aim of the thesis was to carry out a research focused on drug interactions of selected groups of cardiovascular drugs and to describe their management in clinical practice, which could be used during dispensing medicine. Then was evaluated occurrence of these drug interactions in pharmacotherapy of community pharmacy patients.

Methods: With the help of selected databases were described individual drug interactions of ACEI and created their management in clinical practice. Sample of patients of community pharmacy was screened for drug interactions. The data were processed by retrospective analysis. For 12 patients with drug interactions were processed case reports and tested solution of drug interactions with using of described management of drug interactions during the dispensation.

Results: In the theoretical part 189 drug interactions of angiotensin-converting enzyme inhibitors (ACEI) were processed. In the monitored period, 212 patients received the ACEI. In 30 patients (14.2%) of them were found one or more drug interactions of ACEI.

Conclusions: Due to frequent use of ACEI in high risk populations, along with active ingredients (loop diuretics, potassium chloride, nonsteroidal anti-inflammatory drugs), which could interact with ACEI, a pharmacist should not underestimate the possibility of drug interaction incidence. A pharmacist should also ensure that the coadministration of these active ingredients is safe, and should minimize risks of drug interactions. If the both active ingredients are indicated, is regularly monitoring of patient usually sufficient. Drug interaction of ACEI usually can’t be solved by replacing ACEI with sartans, because they often interact with the same active ingredients.

Keywords: Cardiovascular drugs, drug interactions, pharmaceutical care