ABSTRACT

THE EVALUATION OF THE PRESCRIPTION OF ANTICHOLINERGIC DRUGS IN HOME CARE ELDERLY PATIENTS

Student: Hnátková Kateřina

Dissertation supervisor: Fialová Daniela, PharmD, Ph.D

Consultant: Asoc.Prof. Vlček Jiří, Ph.D

Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University in Prague, Czech Republic

Introduction: Pharmacological research studies have demonstrated anticholinergic activity of a number of effective substances that were originally considered non-anticholinergic. Owing to this fact adverse anticholinergic effects (ACH AE) need not to be stated in information sources for health care professionals and patients.

Objective: The objective of the diploma thesis was to evaluate the information about ACH AE, stated with medicinal products containing active effective anticholinergic substances in main articles, SPCs (Summary Product Characteristics) and in patient electronic leaflets of the AISLP (Automatic Information System of Medicinal Drugs) database. One of the aims was also to evaluate the frequency of prescription of these medicinal products and their combinations in Prague home care seniors.

Methods: Data on the ACH AE was obtained from the main articles, from the SPC and the patient electronic leaflets of the Micro database - version AISLP - ČR 2006.3 for MS Windows. Information was interconnected with medicinal product data of a representative sample comprising 428 seniors in homecare in Prague. The aforementioned set was obtained by the prospective examination of a representative sample of seniors of Prague homecare agencies (European project ADHOC (AgeD in HOme Care), September 2001- January 2002). The extent of prescription of effective substances with anticholinergic activity and their combinations was evaluated.

Results: Information on the o ACH AE in drugs with proven anticholinergic activity is not sufficiently stated in the AISLP database, in particular in the group of antibiotics, immunosuppressive agents, corticosteroids and gastrointestinal medicinal products. Least information occurs in the main articles, most in the summary information on medicinal products. The most neglected ACH AEs included the deterioration of closed-angle glaucoma, the impairment of cognitive functions and urine retention. The most frequently prescribed medicinal drugs in the set under observation included digoxin, hydrochlorothiazide, furosemide and theophylline; the drug combinations included combinations of digoxin and furosemide, digoxin and hydrochlorothiazide, furosemide and isosorbide dinitrate.

Conclusion: Medicinal drugs with newly demonstrated anticholinergic activities are frequently prescribed for the senior population. Although the use of these drugs can contribute to more frequent occurrence of ACH AE (in seniors in particular), information about possible ACH AE is not sufficiently given in the information sources for health care profesionals and patients.