

ABSTRACT

INTRODUCTION

Cardiovascular diseases (CVD) are currently on the first place among the causes of death worldwide and also in the Czech Republic (CR). The most common causes of death among CVDs are disorders associated with atherosclerosis (ATS) and the prevalence of atherosclerosis and their complications increases with increasing age. The aim of this diploma thesis was to document CVS morbidity in geriatric patients in the sample of FIP7 program of the EUROAGEISM H2020 project, mainly the prevalence of CVS disorders associated with ATS, and to evaluate the control of risk factors associated with general risks of progression of ATS.

METHODS

The data collection for this theses was carried out in the CR from September 2018 to January 2019 in patients in acute care at the age of 65 and older at geriatric wards in Hradec Králové (HK) and Brno. Patients involved in the study were those admitted to hospitalization at the time of data collection, were complying with inclusion criteria and undersigned the informed consent. The Ethics committee of the Faculty of Pharmacy, Charles University and ethics committee of participating healthcare facilities approved the project. Information have been obtained using the questionnaire for comprehensive geriatric assessment which is the secured instrument of the EUROAGEISM H2020 project. (information was found in medical records as well as completed based on information received from interviews of medical staff and patients). From complex data were analyzed: main sample characteristics, prevalence of CVS atherosclerotic diseases, incidence and severity of acute CVS symptoms, prevalence of major RFs of ATS and associated laboratory values. The analyzed data also included non-pharmacological habits of patients (smoking, alcohol intake, obesity and current dietary measures). The pilot outputs were processed by basic statistical descriptive analyses and results between centres compared using Fisher's exact test (statistical significance $p < 0,05$).

RESULTS

In the whole sample (288 patients), the majority of older adults were at the age category between 65–74 years with the prevalence of 35,8%. There were 57,3 % women in whole sample. Most of the patients (50,3 %) were taking 5–9 medical products (MP) and were in the category of patients having 5–9 diseases. The most common CVD connected to ATS was arterial hypertension (AH- 84,7 %. From all patients with CVD (N = 268 patients) there were 32 % former smokers in Brno and 31,4 % in HK and 6,8 % of current smokers in Brno and 11,6 % in HK. Intake of hard alcoholic drinks was documented in 12,9 % of seniors in Brno and 9,1 % in HK. The percentage of overweight patients and patients with obesity were 55,8 % in Brno and 67 % in HK. Therapeutic diet was documented in 42,9 % of patients in Brno and 78,5 % in HK. There was found non-compensated hypertension above arbitrary values in 11,6 % patients in Brno and 5 % in HK. Fasting glucose levels were not measured in 72,1 % of patients in Brno and 18,2 % of patients in HK. Laboratory uric acid levels were not observed in more than 50 % of men and women. In terms of lipid levels, the highest levels of low density lipoprotein (LDL) -cholesterol were found in Brno in 29.3 % patients and in HK in 25.6 % of patients. In Brno, according to the calculations of Chronic Kidney Disease Epidemiology Collaboration (CKD-epi), the highest prevalence of patients was in the phase 3 of chronic renal failure (3a+3b)- 40,1 %, in contrast to HK where the highest number of patients were in phase 2, with the percentage of 43,8 %. Patients in HK went to see more medical specialists, used more other healthcare services and were also more depressed. On the other hand, they were more satisfied with healthcare during hospitalizations compared to the sample in Brno.

CONCLUSION

The differences in the prevalence of smoking and alcohol intake were not statistically significant between in HK and Brno and the prevalence of patients with these factors were low. The prevalence of patients following dietary measures associated with dyslipidemia or being overweight or having obesity was also low, suggesting that these measures were unpopular. On the other hand, high prevalence of patients with insufficiently preventively controlled

parameters of metabolic syndrome (MS) was found in both healthcare facilities. The main interventions should therefore focus on both preventive dietary measures and adequate check of laboratory parameters that may allow early detection of ATS and MS.

Keywords: atherosclerosis, cardiovascular disease, metabolic syndrom, risk factor, seniors

Dedication:

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