Risk factors research of coronary artery disease patients in region of the Municipal Hospital Caslav

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INTRODUCTION

Hypertension is one of the most important risk factors (RF) of cardiovascular diseases prevalence and progress. We decided to find out the level of hypertension control and prevalence of the other RF in the patients with manifest coronary artery disease (CAD), who have been followed in our outpatient clinic. We selected patients with CAD, because they are the patients with the highest risk of the next cardiovascular event. The most consistent intervention of the particular RF to achieve target levels should be given to these patients.

MATERALS and METHODS

We examined 100 patients (69 men and 31 women) at the age from 33 to 70 years. The average age of the group was 57,9 years, 41 of the examined patients were older than 60 years. These were hospitalised during the period of time from 4/1999 to 9/2001 for one of the following events: 1. First elective or emergency coronary artery bypass graft (12 pts), 2. First elective or emergency percutaneous transluminal coronary angioplasty (10 pts), 3. First or recurrent myocardial infarction (MI) without previous CABG or PTCA (48 pts). 4. First or recurrent proved acute myocardial ischaemia without MI (30 pts).

Examination of the group was done precisely according to the EUROASPIRE II trial design.

The patients were classified into particular diagnostic categories according to their discharge diagnoses. Examination was done within the period of time not shorter than 6 months and not longer than 24 months after hospitalisation. The examination included family history of CAD, personal history of CAD, history of lifestyle factors (smoking, diet, exercise), presence of hypertension, diabetes mellitus, hyperlipoproteinemia and recent pharmacotherapy. At the same time the basic measurements like height, weight, body mass index (BMI), waist-to-hip ratio (WHR) and blood pressure were done. The total cholesterol and exhaled carbon monoxide using EC50MICRO III Smokerlyzer were estimated. Obesity was defined as BMI $\geq$ 30 kg/m2. Hypertension was defined as systolic blood pressure $\geq$ 140 mmHg and/or diastolic pressure $\geq$ 90 mmHg. We considered the total cholesterol $\geq$ 5 mmol/l hypercholesterolemia.

RESULTS

In our group the prevalence of smoking was 14%. Almost 1/5 of the checked patients smoked. None of our patients was hiding his/her smoking, which we appreciate. The number of positive responses corresponded to the number of the positive CO exhaled tests. The prevalence of obesity in our group was 63%, most of our patients were fat. Hypertension was present in 59% of our patients. The state of hypertension control in the CAD patients of our region we consider unsatisfactory. Its prevalence is certainly related to obesity. Hypercholesterolemia was found in 47% of the patients. The prevalence of diabetes mellitus was 30%.The most of the patients had a combination of several RF.

In the second part of the study the level of pharmacotherapy in the secondary prevention of CAD was evaluated. Antiplatelet therapy was used by 92% of our patients. All of them took low-dose aspirin. Beta-blockers were taken by 88% of our patients. ACE inhibitors were given to 48% of the patients in the group. Hypolipidemics were given to 82% of the patients and statins to 60% of them.

CONCLUSIONS

Prevalence of the risk factors in the patients with manifest coronary artery disease was found out and their pharmacotherapy analyzed. This work can serve as our own audit of care for the patients with CAD in the region of our hospital, based on international guidelines for primary and secondary prevention of CAD. The prevalence of the reversible RF is unsatisfactory. The prevalence of obesity is alarming and the level of hypertension control is not good as well. Our results clearly demonstrate the need for a more consistent hypertension control and other RF intervention in the patients with CAD in our region. Otherwise, we believe that results in the pharmacotherapy are clearly positive. The design of the EUROASPIRE II study was used for our work. It is not possible to make static comparison because of the time shift of data collection.

From our own experience we presume, that introducing guidelines into the clinical reality is not always easy, but it is necessary for improving the quality of care for these patients.

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