

RISK OF PERIOPERATIVE COGNITIVE DYSFUNCTION IN THE ELDERLY HOME RESIDENTS

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Objective: Surgery and the acute critical situations represent a serious stress even for the healthy seniors. The start of involuntional deterioration and its speed in the elderly is individual. Risk factors of atherosclerosis accelerate the aging and increase the perioperative risk. The aim of the presented study was to estimate the cardiovascular risk profile and cognitive functions in residents of elderly homes in metropolitan and rural region.

Methods: Group A consisted of 500 inhabitants of two Bratislava elderly homes (280 men-M, mean age 76.3 yrs and 220 females-F, mean age 79.8 yrs). An identical age group (B) of elderly home in rural district (Gabčíkovo) was examined. The questionnaire was oriented on the presence of cardiovascular risk factors and leisure time physical activity. Physical examination included weight, height and repeated blood pressure measuring. Blood count, lipid profile and glycemia were measured, activities of daily life (Barthel's ADL Index), and cognitive functions by Folstein's MMSE (Mini Mental Stage Examination) test were estimated.

Results: In group A hypertension was present in 52 % of M and 78 % of females. In group B hypertension was present in 37 % of M and 51 % of F. In the metropolitan group elevated LDL-cholesterol level was found in 50 % of M and 76 % of F, in the rural population high level of LDL-cholesterol was in 37 % of M and 38 % of F. Hypertriglyceridemia was found in 18 % of M and 20 % of F, in group B in 20 % both in M and F. Glucose tolerance impairment and diabetes were detected in group A in 47 % of M and 44 % of F, in group B in 49 % and 50 %, respectively. More than 50 % of both groups were obese. In group A smoking was in 33 % of M and 13 % of F, in group B 32 % of M and 3 % of F. There was high percentage of more than 2 risk factors combination. Almost 50 % of both groups were not self-dependent. Normal level of MMSE test was found only in 20 % of metropolitan M and F, in rural group only 24 % of M and 8 % of F.

Conclusions: The presented results are clear evidence that the group of elderly home residents represents a high risk population with a high rate of polymorbidity and cognitive function impairment. This category is therefore considered as a very vulnerable for the perioperative and postoperative functional deterioration.