LONG-TERM EFFICACY OF ANTIHYPERTENSIVE THERAPY IN OLD-AGE PATIENTS WITH ESSENTIAL HYPERTENSION

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Hypertension is a potent and modifiable risk factor for cardiocerebrovascular diseases, accounting for more than 50% of deaths for stroke and 25% of those for coronary heart diseases. Systolic blood pressure (SBP) increases continuously throughout adult life and the prevalence of isolated sistolic hypertension (ISH) rises accordingly, reaching 53-78% among those aged 65-74 years. This study was planned to assess prognostic factors influencing the long-term maintenance of the blood pressure in elderly. A retrospective study was performed, studying 127 old patients (mean age 76,7 ± 7,1 years) admitted to the Division of Medicine, with a diagnosis of uncontrolled essential hypertension, with an equal distribution between gender. All patients were diagnosed with ISH; the anti-hypertensive drug regimen was then assessed to reach the optimal value of SBP $\leq$ 130 mm Hg, that was achieved in 44% of patients. Once the patient was discharged, the efficacy of the drug therapy was followed ever 3 months over a period up to 2 years. Comparison between groups were performed by mean of t-test, Kruskall-Wallis test or Fisher exact test. The prognostic factors to the maintenance of a controlled SBP at a short term (3 months) and at long-term (2 years) were evaluated by mean of a logistic regression and a interval-censored parametric survival model, respectively. Results indicated that the monotherapy was effective only in 22 patients (17,3%), while the most part of patients required a combined, multidrug therapy, that for the most cases included a diuretic associated with either a sartan and/or amlodipine. In the follow up, the incidence of failure of blood pressure control was 25% at 3 months, 22% at 6 months 50% at 24 months, while the efficacy of the drug therapy was better maintained if amlodipine was present in the drug regimen. Interestingly, SBP value was the only predictor of failure at 3 months (RR=1.04,CI:.99-1.09; p=.07). The multivariate survival analysis indicated that different parameters were involved in the long-term control of blood pressure in our patient cohort: 1) the female gender, showing an increase of free time from failure greater than 66% compared to male gender (p=0.001); 2) the SBP, with a decrease of free time of 3% for each point of SBP increase (p<0.001), and the presence of a calcium channel blocker such as amlodipine with a 65% increase of free time in the combined therapy (p<0.001). In conclusion, the female gender, the SBP $\leq$ 130 mm Hg, and the presence of amlodipine in the combined therapy (with diuretics) were factors that positively influence the long-term maintenance of the blood pressure control in old-age patients.