

Objective – to evaluate the 8-year prognosis of fatal and non-fatal complications in patients with arterial hypertension (AH) combined with non-cardiological pathology.

Materials and methods. This retrospective-prospective clinical study included 637 patients who were routinely hospitalized at the National Medical Research Center for Therapy and Preventive Medicine of the Ministry of Health of the Russian Federation for diagnostic procedures and adjustment of drug therapy. Inclusion criteria: men and women aged 40-80 years with AH (according to the Russian Society of Cardiology guidelines, 2024) without other cardiovascular diseases. The presence of other somatic diseases and risk factors for chronic non-communicable diseases was permitted. After 8 years of follow-up, telephone interviews were conducted with patients and their close relatives to record complications, including fatal and non-fatal cases. The response rate was 91.4%.

Results. Initially, patients with AH were divided into two groups depending on the number of additional non-cardiological diseases: AH combined with one non-cardiological disease and AH combined with two or more non-cardiological diseases. In the first group, all-cause death was registered in 13.3%, while in the second group, fatal outcomes were twice as high, amounting to 24.8% of cases ($p = 0.001$). All-cause mortality rates differed significantly between men and women in both groups. Cardiovascular death in the second group was registered in 15.8% of cases, and in the first group in 9.7% of cases. During the follow-up period, myocardial infarction was detected in 2.6% of cases in the first group and in 4.9% of patients in the second group. In the first group, stroke was registered in 3.6% of patients, and in the second group in 4.4% of patients. The majority of deceased patients from cardiovascular complications in the first group initially had stage 2 hypertension and high cardiovascular risk, whereas in the second group, this status was registered in every second deceased patient. In the second group, about 46% of deceased patients initially had stage 3 hypertension and very high cardiovascular risk.

Conclusion. Thus, over the 8-year follow-up period, in the group of patients with AH combined with two or more non-cardiological diseases, all-cause mortality was twice as high, and cardiovascular mortality was 1.5 times higher compared to the group of patients with AH combined with one non-cardiological disease. It is evident that when developing preventive programs, it is necessary to take into account not only the stages of AH, modifiable risk factors, and target organ damage, but also the presence of additional non-cardiological diseases, which collectively increase the risk of complications and fatal outcomes.