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Objective: The aim of this study was to investigate the association between diabetes-related risk factors and cognitive impairments assessed by different scales in patients with type 2 diabetes mellitus.

Methods. We enrolled 101 patients with type 2 diabetes mellitus, mean age 62.2±5.61 years, BMI was 32.6±10.08 kg/m2, diabetes duration was 9.7±6.73 years, HbA1c – 8.1±1.36%. All subjects studied did not have any history of cerebrovascular accidents or depressive episodes. It has been assessed memory, speed, executive function. The statistical analysis was performed using SPSS-15.

Results. We revealed some association between diabetes-related risk factors and cognitive impairments in patients with type 2 diabetes mellitus. It was the negative correlation between duration of diabetes and executive functioning impairments revealed by SCWT, r=-0.22, p<0.05. Also, executive functioning was inversely affected by higher HbA1c levels, r=-0.23, p<0.05. Higher systolic blood pressure was associated with worsening of cognitive functioning by RAVLT, it was significant negative correlation between blood pressure and immediate memory (r=-0.29, p<0.01) and delayed memory (r=-0.23, p<0.05). The negative association between systolic blood pressure and working memory assessed by DSFB was revealed (r=-0.20, p<0.05).

Conclusion. There is a correlation between impairments of cognitive functioning and diabetes-related risk factors in patients with type 2 diabetes mellitus.