



## Features of cognitive functions in patients with arterial hypertension with the presence / absence of chronic heart failure

Yusupova Kh.F., Radjabova G.M., Abdullaeva G.Zh., Khamidullayeva G.A.

Republican Specialized

Scientific and Practical Medical Center of Cardiology, Tashkent, Uzbekistan

**Objective:** To assess the state of cognitive functions in patients with arterial hypertension (AH) with the presence / absence of chronic heart failure (CHF).

**Material and methods of research.** During the observation period, 100 sick men and women with I-III degree of arterial hypertension (AH) according to classification (ESH / ESC, 2018) were examined, who are on outpatient treatment at the Republican Specialized Scientific and Practical Medical Center of Cardiology. The stage of CHF was established according to the classification (ESH / ESC, 2020), the criterion for exclusion from the study was CHF IIB-III stage. The average age of patients was  $55.8 \pm 12.2$  years, with a rare duration of hypertension -  $9.4 \pm 6.7$  years. All patients were initially measured office systolic blood pressure (SAD) and diastolic blood pressure (DAD). Cognitive functions were assessed using neuro-psychological tests: Mini-Cog test (drawing hours, reproducing words), Montreal scale for assessing cognitive Functions (MOCA) - a questionnaire on self-assessment of memory, attention, thinking, the ability to cope with their affairs, the ability to make a decision. The Hospital Anxiety and Depression Scale (HADS) was used to assess anxiety and depression levels. The results are presented as  $M \pm SD$ .

**Outcomes.** In order to study the features of cognitive functions in patients with hypertension, taking into account the presence / absence of CHF, all patients were divided into two groups: 1 group of patients with hypertension without CHF ( $n = 78$ ) and 2 group - patients with hypertension with CHF I-II A stage ( $n = 22$ ).

The analysis of cognitive functions in patients with hypertension revealed good indicators of cognitive functions in patients with hypertension without CHF in comparison with patients with hypertension with the presence of CHF I-II A stage. In particular, the overall score on the Mini-Cog test: in group 1 was  $4.05 \pm 0.92$  points, in group 2 -  $3.45 \pm 1.4$  points ( $p < 0.05$ ), and the function of drawing the clock was much better:  $1.72 \pm 0.55$  points in group 1 against  $1.4 \pm 0.85$  points in group 2 ( $r < 0.05$ ).

The overall score on the MOCA scale was slightly higher in group 1 of patients than in group 2:  $24.59 \pm 2.65$  against  $23.31 \pm 3.83$  points,  $p = 0.075$ . At the same time, self-esteem of attention was better in group 1 of patients than in group 2:  $8.76 \pm 1.51$  against  $7.84 \pm 2.46$  points,  $p < 0.05$ . Visual-constructive executive skills were also better in group 1 of patients than in group 2:  $4.13 \pm 1.05$  against  $3.5 \pm 1.47$  points,  $p < 0.05$ . Coping with work in group 1 of patients was somewhat better than in group 2:  $9.09 \pm 1.37$  against  $8.31 \pm 2.39$  points,  $p = 0.072$ .



# The Peerian Journal

Open Access | Peer Reviewed

Volume 10, September, 2022.

Website: [www.peerianjournal.com](http://www.peerianjournal.com)

ISSN (E): 2788-0303

Email: [editor@peerianjournal.com](mailto:editor@peerianjournal.com)

**Conclusion.** Thus, in patients with hypertension with the presence of CHF I-II A stage, the severity of cognitive impairment is noted, in contrast to patients without CHF.

## References:

1. Breteler, Monique MB, et al. "Cardiovascular disease and distribution of cognitive function in elderly people: the Rotterdam Study." *Bmj* 308.6944 (1994): 1604-1608.
2. Anderson, Craig, et al. "Renin-angiotensin system blockade and cognitive function in patients at high risk of cardiovascular disease: analysis of data from the ONTARGET and TRANSCEND studies." *The Lancet Neurology* 10.1 (2011): 43-53.
3. Almeida, O. P., and L. Flicker. "The mind of a failing heart: a systematic review of the association between congestive heart failure and cognitive functioning." *Internal Medicine Journal* 31.5 (2001): 290-295