

Diastolic dipping in groups 1 and 2 was 8.6 [3.7; 13.3] % and 16.6 [12.9; 21.8] %, respectively ($p=0.005$). Dippers constitute 22.2% out of the patients with AH and LVDD while 50.0% out of hypertensive patients without LVDD ($p=0.05$). Non-dippers constitute 61.1% out of first group while 19.4% out of second group ($p=0.002$). Extreme-dippers constitute 16.7% and 11.1% out of hypertensive patients with and without LVDD respectively ($p>0.05$). Reverse-dippers were absent in both groups.

Conclusion. The incidence of LVDD in patients with AH was 33.3%. In LVDD, insufficient nocturnal reduction in SBP and DBP is significantly more often detected.

ЛИТЕРАТУРА

1. The impact of diastolic dysfunction as a predictor of cardiovascular events: A systematic review and meta-analysis / R. Ladeiras-Lopes, M. Araújo, F. Sampaio [et al.] // *Rev Port Cardiol (Engl Ed)*. – 2019. – Vol. 38, iss. 11. – P. 789–804.
2. Cappuccio F. P. The Role of Nocturnal Blood Pressure and Sleep Quality in Hypertension Management // *Eur Cardiol*. – 2020. – Vol. 15. – Art. № e60.
3. 2020 Clinical practice guidelines for Chronic heart failure / S. N. Tereshchenko, A. S. Galyavich, T. M. Uskach [et al.] // *Russian Journal of Cardiology*. – 2020. – Vol. 25, iss. 11. – P. 311–374.
4. Cheng Y., Li Y., Wang J. Ambulatory blood pressure monitoring for the management of hypertension // *Chin Med J (Engl)*. – 2022. – Vol. 135, iss. 9. – P. 1027–1035.

ELECTROCARDIOGRAPHIC PARAMETERS ASSOCIATED WITH OBSTRUCTIVE CORONARY ATHEROSCLEROSIS IN PATIENTS WITH ISCHEMIC HEART DISEASE

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Introduction. Early diagnosis of coronary atherosclerosis is mainly based on risk stratification approaches, including medical history, physical examination, electrocardiograms and serum cardiac marker measurements and therefore the diagnosis requires a careful review of cardiac ischemia manifestations [1]. In patients with hemodynamically significant obstructive coronary atherosclerosis, myocardial ischemia is manifested not only by ST segment depression on ECGs, but also by parameters such as QT interval duration, $T_{(Peak-End)}$ interval duration and $T_{(Peak-End)}/QT$ ratio which are characteristic due to an increase in the instability of the state of cardiomyocytes in the phase of ventricular repolarization.

Aim of the study. To evaluate electrocardiographic parameters associated with obstructive coronary atherosclerosis in patients with ischemic heart disease (IHD).

Materials and methods. The retrospective study included 85 patients with chronic IHD who were admitted for diagnostic coronary angiography (CAG) to verify the diagnosis of stable angina. Patients with at least one stenosis, which included $\geq 50\%$ of vessel diameter, were classified as having significant IHD. Upon admission, a resting standard 12-lead ECG was recorded. ECGs were taken at a paper speed of 50 mm/s and calibration of 10mm/mV. Statistical analysis was performed using the STATISTICA 12.0 software.

Results and discussion. According to the results of CAG, 33 patients didn't have hemodynamically significant coronary atherosclerosis (coronary artery stenosis $< 50\%$, group 1) and 52 patients had obstructive coronary atherosclerosis (coronary artery stenosis $\geq 50\%$, group 2). Patients with significant coronary atherosclerosis were characterized by higher functional classes of stable angina, higher degree of arterial hypertension and had a history of type 2 diabetes mellitus compared to patients without coronary lesions ($p < 0.05$).

According to the results of ECG's patients of both groups didn't have significant differences in heart rate (65 [58; 72] vs 62 [56; 69] b.p.m., $p > 0.05$), duration of P wave (102 [100; 110] ms vs 107 [102; 110] ms, $p > 0.05$) and QRS complex (89 [80; 100] ms vs 88 [80; 100] ms, $p > 0.05$). However, QT interval duration was longer in patients of group 2 compared with group 1 (397 [360; 420] ms vs 422 [400; 440] ms, $p = 0.005$). Moreover patients of groups 1 and 2 didn't have significant differences in $T_{(Peak-End)}$ interval duration (79 [70; 80] ms vs 78 [65; 82] ms, $p = 0.816$), but patients of group 2 had lower $T_{(Peak-End)}/QT$ ratio than patients of group 1 (0.20 [0.17; 0.22] vs 0.18 [0.15; 0.21], $p = 0.047$).

It is interesting to note that patients of both groups didn't have differences in ST segment depression (more than 0.5 mm) prevalence (10 (30.3%) vs 23 (44.2%), $p = 0.277$). Average ST dispersion was 1 [0.05; 1] mm in group 1 and 1.2 [1; 1.5] mm in group 2, $p = 0.433$).

Conclusion. Patients with significant obstructive coronary atherosclerosis had higher values of QT interval, as well as lower $T_{(Peak-End)}/QT$ ratio in comparison with patients without coronary atherosclerosis ($p < 0.05$).

ЛИТЕРАТУРА

1. Diagnostic performance of electrocardiography in the assessment of significant coronary artery disease and its anatomical size in comparison with coronary angiography / S. Mahmoodzadeh [et al.] // J Res Med Sci. – 2011. – Vol. 16, №6. – P. 750–755.