

показником АРАСНЕ II менше 5 балів на момент госпіталізації, активна хірургічна тактика не мала статистично значущого впливу на частоту незадовільних результатів лікування, і не було суттєвої різниці між станом дренованих та не дренованих пацієнтів. Ці результати підтверджують відсутність впливу рутинного абдомінального дренажу на всіх пацієнтів з гострим некротичним панкреатитом. Однак пацієнти з оцінкою АРАСНЕ II 5 і вище є категорією пацієнтів, у яких найбільш виправданий ранній дренаж асцит-перитоніту.

Ключові слова: асцит-перитоніт, гострий панкреатит, черевний дренаж, тяжкість стану.

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менше 5 балів на момент госпіталізації, активна хірургічна тактика не мала статистично значущого впливу на частоту неудовлетворительных результатов лечения, и не было существенной разницы между состоянием дренированных и не дренированных пациентов. Эти результаты подтверждают отсутствие влияния рутинного абдомінального дренажа на всех пациентов с острым некротическим панкреатитом. Однако, пациенты с оценкой АРАСНЕ II 5 и выше являются категорией пациентов, у которых наиболее оправдан ранний дренаж асцит-перитонита.

Ключевые слова: асцит-перитонит, острый панкреатит, брюшной дренаж, тяжесть состояния.

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DAILY BLOOD PRESSURE PATTERN DISORDERS IN PATIENTS WITH STAGE II ESSENTIAL HYPERTENSION AND FREQUENT PREMATURE BEATS

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156 patients (65 men and 91 women) with stage II hypertension (stage II EH) were examined. The main group consisted of 124 of them, which according to the daily monitoring of the electrocardiogram had frequent supraventricular (SVPB) (74 persons) or ventricular PB (VPB) (50 persons). The comparison group included 32 patients with stage II EH without arrhythmia. It was established that patients with stage II EH and PB had significantly higher values of systolic (SBP) and diastolic blood pressure (DBP) during the day according to the data of daily blood pressure monitoring (DBPM). In patients with stage II EH, regardless of the presence of arrhythmia, there was a decrease in patients with dipper type and an increase in the number of pathological types of diurnal profile by SBP level, without a significant difference between the groups. In patients with stage II EH with PBs, the daily profile of non-dipper according to the DBP level was more frequent ($p = 0.03$). The presence of frequent VPB was associated with a predominance of the non-dipper profile in terms of DBT (76.0%, $p = 0.0003$) compared with patients with SVPB. The data obtained indicate a certain associative link between the disturbance of the diurnal BP profile, mainly DBT and the presence of PBs, namely in patients with stage II EH.

Key words: hypertension, supraventricular PB, ventricular PB, daily blood pressure monitoring, daily blood pressure profile.

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Patients with arterial hypertension (AH) may have a variety of cardiac arrhythmias that contribute to cardiovascular complications. At present, atrial fibrillation is the most studied rhythm disorder. Despite that, the factors and mechanisms of the occurrence of supraventricular (SVPB) and ventricular (VPB) premature beats in hypertension have not been investigated sufficiently [1, 4, 8, 11].

There is evidence of a higher level of systolic blood pressure during the day (DSBP) and night (NSBP) in patients with arrhythmias. Episodes of SVPB have been registered on the background of high systemic blood pressure (BP) irrespective of the presence of left ventricular hypertrophy (LVH), which denies the leading role of myocardium structural remodeling in the occurrence of premature beats (PB) [8, 10]. According to other researchers, more frequent or more threatening VPB were associated not only with increased SBP but also with increasing LV myocardial mass [5]. Also, the influence of BP circadian variability on ventricular and atrial arrhythmias has been demonstrated [6]. It is determined that the continuous prolonged increase in blood pressure at night (non-dipper pattern) is an independent predictor of frequent and severe ventricular arrhythmias. The electrical instability of the myocardium on the background of changes in the circadian BP pattern could be explained by the direct relationship between BP changes and QT interval duration as well as the magnitude of its dispersion. The severity of structural changes of the atria and ventricles also can lead to the electrical instability of the atria and ventricles and to the occurrence of SVPB and VPB in such patients [6].

The state of the autonomic nervous system plays an important role in the BP regulation and the occurrence of hypertension [10]. According to the Framingham study, individuals with high blood pressure

had a decrease in heart rate variability. Also, low heart rate variability in individuals with normal BP indicated a high risk of hypertension. Other scientists have drawn attention to the pathogenetic relationship between the severity of hypertension and low heart rate variability. These disorders were circadian in nature and were more pronounced in patients with insufficient nocturnal BP decrease (non-dippers) [4].

Today, the role of cardiac arrhythmias as predictors of the development of acute circulatory disorders is well known. The combination of high BP and arrhythmia increases the likelihood of stroke dramatically even without taking into account other adverse factors [8, 9]. According to large-scale epidemiological studies, the presence of PBs in hypertension increases the risk of cardiac death, even in the absence of concomitant coronary heart disease [8, 9]. However, the role of daily BP pattern disorders in the incidence of various cardiac arrhythmias in patients with hypertension is not fully clarified despite the abovementioned information and requires additional study.

The purpose of the study was to evaluate the changes in daily blood pressure pattern in patients with stage II hypertension and frequent PBs.

Materials and methods. The study was preceded by a screening and thorough collection of complaints and medical history. The signing of informed consent to participate in the study was done in accordance with the ethical rules of the Helsinki Declaration.

The study included 124 patients with stage II essential hypertension (EH) and frequent symptomatic PBs aged from 27 to 75 (mean age 58.2 ± 0.9) years, who formed the main clinical group. The comparison group consisted of 32 patients aged within 32 and 72 (mean age 55.9 ± 1.7) years with stage II EH without any cardiac arrhythmias. In the main group, 50 (40.3%) patients were male and 74 (59.6%) were female. The comparison group consisted of 15 (46.9%) men and 17 (53.1%) women. There were no statistically significant differences between the main and the comparison groups by age and sex ($p > 0.05$), which indicated to the age and gender homogeneity of the participants.

Among 124 patients with EH and concomitant frequent PBs there were 74 (59.7%) cases of supraventricular (SVPB) and 50 (40.3%) of ventricular (VPB). Arrhythmic history ranged from 1 to 27 years and averaged 8.06 ± 0.42 years. 30 (24.2%) patients of the main group have felt a variety of symptoms during the last year. The most common was the feeling of failed heartbeat or pauses in cardiac rhythm. Instead, the vast majority (94 (75.8%) patients) experienced episodic arrhythmias in the form of intermittent episodes. In 32 (25.8%) patients arrhythmia occurred in the active part of the day (from 06:00 to 21:00) and was associated with exposure of physical or psycho-emotional stress, and in 14 (11.3%) persons – during the passive period of the day (from 21:00 to 06:00) at rest during asleep (according to the HM data). It is noteworthy that 48 (38.7%) patients had no clear association of their arrhythmia with the period of the day and the arrhythmia was observed regardless of their activity at any time of day. All patients were examined and treated in the cardiology department of the Vinnytsia Pirogov Memorial Regional Clinical Hospital, in the clinical and diagnostic department or the department of heart rhythm disorders of communal non-commercial enterprise “Vinnytsia Regional Clinical Treatment Center of Cardiovascular Pathology” during 2016-2019.

All patients were examined at the inclusion stage by complete clinical, laboratory and instrumental methods in order to verify the main diagnosis and concomitant conditions. General clinical and anthropometric examination, office BP measurement, 12-lead ECG, daily BP and ECG monitoring, cardiac and carotid ultrasound were performed in all patients who agreed to participate in the study.

The identification of indications and contraindications, the establishment of the diagnosis and concomitant pathology, the evaluation of medical history were obligate in all participants. They followed by the formation of clinical study groups. The anthropometric examination included measurement of height and weight with the calculation of the body mass index (BMI) by the Kettle formula. It was calculated as the ratio of body weight in kilograms to height in meters, elevated to the square (kg / m^2), waist circumference (WC) and hip circumference (HC) [2]. BP was measured according to the recommendations of the Ukrainian Society of Cardiologists (2013) using a sphygmomanometer “Microlife”. Electrocardiography was performed according to the standard procedure in 12 leads on the electrocardiograph “UKARD” (Hungary).

Daily BP monitoring (DBPM) and HM were performed using the hardware and software “DiaCard” (JSC “Solvaig”, Ukraine) according to the standard protocol. The following generally accepted parameters were estimated based on DBPM data: daily average systolic BP, daytime systolic BP, and nighttime systolic BP (SBP, DSBP, and NSBP, respectively), diastolic BP (DBP, DDBP, and NDBP, respectively) and pulse BP (PBP, DPBP, and NPBP, respectively, mm Hg). The following indexes were also calculated: hypertensive time index for SBP and DBP per day, in % (HI SBP, HI DBP respectively); diurnal index of SBP and DBP (DI SBP and DI DBP respectively) in %; the variability of daytime and

nighttime SBP (Var SBPd and Var SBPn respectively) and DBP (Var DBPd and VarDBPn respectively) in mm Hg. Art. The analysis of the SBP and DBP daily pattern was performed using standard criteria for the DI for SBP and DBP separately: dipper – DI from 10 to 20%, non-dipper – DI from 0 to 10%, night-peaker – DI <0% and over-dipper – DI > 20% [3, 7].

The indicators that characterized the structure of the daily heart rate were evaluated based on the HM data: daily average, day and night heart rate (HR, DHR, and NHR respectively) and circadian index (CI), which was calculated by the formula $CI = DHR / NHR$. The following parameters were evaluated to assess the arrhythmias: the number of SVPB and VPB per 24 hours of ECG monitoring; the number of SVPBs and VPBs registered per 1 hour (SVPB₁ and VPB₁ respectively); the number of paired and group VPB (VPBp) and the number of patients with such arrhythmias [3, 7].

Statistical processing was performed using the software “Statistica” v.12.0 (StatSoft). The results are presented as the mean (M) and the mean error (m) for the quantitative values, as the median and the limit of the interquartile interval with the indication of 25 and 75 percentiles, and as percentages (%) for the relative values. A comparison of relative values (%) was performed using the χ^2 criterion. A comparison of quantitative values of independent samples was performed by the Mann-Whitney U test [7].

Results of the study and discussion. The results of DBPM showed that significantly lower levels of blood pressure such as SBP, DSBP, NSBP, DBP, DDBP, NDBP, NPBP, and HI SBP were recorded in patients with EH without arrhythmias rather than in patients with frequent PBs ($p < 0,02$) (table 1).

Table 1

DBPM parameters in the main and comparison groups

DBPM parameters	Comparison Group (n=32)	Main Group (n=124)	P
SBP, mm Hg	148 (137; 158)	161 (147; 170)	0.0004
DBP, mm Hg	86 (78; 92)	91 (85; 98)	0.009
DSBP, mm Hg	150 (139; 163)	166 (148; 177)	0.001
DDBP, mm Hg	88 (80; 97)	96 (89; 100)	0.01
NSBP, mm Hg	140 (127; 155)	160 (140; 166)	0.0002
NDBP, mm Hg	78 (71; 86)	85 (73; 90)	0.02
DPBP, mm Hg	59 (55; 68)	67 (54; 78)	0.10
DPBP, mm Hg	59 (55; 71)	68 (55; 78)	0.07
NPBP, mm Hg	60 (54; 66)	67 (58; 74)	0.01
DI SBP, %	9 (5; 12)	9 (8; 12)	0.42
DI DBP, %	11 (4; 15)	9 (6; 11)	0.35
HI SBP, %	85 (57; 97)	99 (73; 120)	0.003
HI DBP, %	82 (56; 96)	87 (80; 97)	0.07
Var DSBP, mm Hg	18 (15; 22)	18 (14; 21)	0.43
Var NSBP, mm Hg	15 (12; 19)	15 (11; 19)	0.67
Var DDBP, mm Hg	13 (9; 18)	15 (10; 18)	0.29
Var NDBP, mm Hg	9 (7; 14)	11 (9; 16)	0.09

Notes (hereinafter): DBPM - daily blood pressure monitoring, SBP, DSBP and NSBP - daily, daytime and nighttime systolic blood pressure, respectively; DBP, DDBP and NDBP - daily, daytime and nighttime diastolic blood pressure, respectively; PBP, DPBP and NPBP - daily, daytime and nighttime pulse blood pressure, respectively; HI - hypertensive index, DI - diurnal index, Var – variability. Here and in the following tables, the quantitative values are presented as the median and the boundary of the interquartile interval with 25 and 75 percentiles; P - between-group significance calculated on the Mann-Whitney U Test.

The obtained results about higher blood pressure levels in patients with hypertension and heart rhythm disorders compared with patients without arrhythmias are in the agreement with other researchers [1, 5, 6, 8, 10].

The results of the analysis of the DBPM levels in clinical groups, depending on the topical version of PB are presented in the table. 2. It was established that in patients with EH and frequent VPB, unlike patients with SVPB, significantly higher levels of DSBP and NSBP, DI SBP, Var DDBP, Var NDBP ($p < 0.04$) were registered, which also to some extent coincides with results of some scientists [5, 8].

Therefore, there were significantly higher blood pressure levels during the day: daily, daytime and nighttime SBP and DBP between patients with II stage EH with PBs compared with patients without arrhythmias. The presence of VPB in patients with II stage EH was accompanied by significantly higher values of day and night SBP, DI SBP and variability of day and night DBP relative to the corresponding levels in patients with stage II EH and SVPB. The obtained data demonstrate a certain association of the

presence of frequent PBs with a number of indicators that characterize circadian regulation of BP during the day in patients with II stage EH.

Table 2

Indicators of DBPM in patients of the main group with different variants of PB

Indicators of DBPM	SVPB (n=74)	VPB (n=50)	P
SBP, mm Hg	145 (136; 158)	150 (139; 159)	0.51
DBP, mm Hg	86 (78; 92)	87 (78; 97)	0.67
DSBP, mm Hg	148 (138; 158)	155 (142; 168)	0.03
DDBP, mm Hg	87 (80; 95)	89 (80; 100)	0.72
NSBP, mm Hg	136 (130; 145)	147 (137; 154)	0.04
NDBP, mm Hg	78 (72; 86)	77 (70; 89)	0.63
DPBP, mm Hg	59 (54; 68)	61 (55; 70)	0.42
DPBP, mm Hg	58 (54; 68)	60 (55; 71)	0.80
NPBP, mm Hg	60 (54; 66)	60 (54; 66)	0.88
DI SBP, %	7 (3; 10)	10 (6; 14)	0.02
DI DBP, %	10 (3; 15)	12 (9; 16)	0.08
HI SBP, %	79 (50; 96)	90 (63; 97)	0.22
HI DBP, %	84 (54; 97)	81 (56; 96)	0.87
Var DSBP, mm Hg	17 (14; 21)	18 (16; 25)	0.12
Var NSBP, mm Hg	15 (11; 19)	15 (12; 21)	0.59
Var DDBP, mm Hg	10 (7; 17)	14 (9; 19)	0.04
Var NDBP, mm Hg	8 (6; 15)	12 (8; 17)	0.03

Notes: SVPB is supraventricular and VPB is ventricular PB; DBPM - daily blood pressure monitoring, SBP, DSBP and NSBP - daily, daytime and nighttime systolic blood pressure, respectively; DBP, DDBP and NDBP - daily, daytime and nighttime diastolic blood pressure, respectively; PB, DPBP and NPBP - daily, daytime and nighttime pulse blood pressure, respectively; HI - hypertensive index, DI - diurnal index, Var - variability; P - between-group significance calculated on the Mann-Whitney U Test.

Analysis of the nature of the diurnal profile of BP in patients with stage II EH without arrhythmias compared with the main clinical array (patients with stage II EH and PBs) revealed the presence of disorders of the daily profile on circadian level of SBP with an increase in the percentage of pathological types (non-dipper, night-peaker, over-dipper) and reducing the number of patients with dipper type which to some extent coincides with the results of other researchers [5, 6, 8]. It should be noted that no significant differences were found between the two groups for different types of daily profile on the level of SBP (table 3). However, at the DBP level, the non-dipper daily profile was significantly more frequently reported in the group of patients with PBs (56.5% vs. 34.4%, $p = 0.03$) (table 3). The daily night-peaker profile (by DBP level) was not registered in the main clinical group in any case, so it was significantly different from the comparison group, where there were 3 cases, which was 9.4% ($p = 0.0006$).

Table 3

Daily BP pattern in the main clinical group and comparison group

Daily BP profile	Comparison group (n=32)	Main group (n=124)	P
<i>Daily profile by SBP level</i>			
Dipper	12 (37.5%)	50 (40.3%)	0.77
Non-dipper	15 (46.9%)	58 (46.8%)	0.99
Night-peaker	4 (12.5%)	12 (9.7%)	0.63
Over-dipper	1 (3.1%)	4 (3.2%)	0.97
<i>Daily profile by DBP level</i>			
Dipper	14 (43.8%)	39 (31.5%)	0.19
Non-dipper	11 (34.4%)	70 (56.5%)	0.03
Night-peaker	3 (9.4%)	0 (0)	0.0006
Over-dipper	4 (12.5%)	15 (12.1%)	0.95

Notes: BP - blood pressure; P - significance of the difference of results between groups is calculated by the criterion χ^2

Analysis of changes in the diurnal BP pattern between groups of patients with different PB variants showed that there were significant differences between the groups in terms of both SBP and DBP profiles (table 4).

Daily profile of BP in patients of the main group with different variants of PB

Daily profile of BP	SVPB (n=74)	VPB (n=50)	P
<i>Daily profile by SBP level</i>			
Dipper	35 (47.3%)	15 (30.0%)	0.048
Non-dipper	33 (44.6%)	25 (50.0%)	0.55
Night-peaker	4 (5.4%)	8 (16.0%)	0.047
Over-dipper	2 (2.7%)	2 (4.0%)	0.69
<i>Daily profile by DBP level</i>			
Dipper	30 (40.5%)	9 (18.0%)	0.008
Non-dipper	32 (43.2%)	38 (76.0%)	0.0003
Night-peaker	0 (0)	0 (0)	-
Over-dipper	12 (16.2%)	3 (6.0%)	0.09

Notes: BP - blood pressure; SVPB is supraventricular PB, VPB is ventricular PB; P - significance of the difference of results between groups is calculated by the criterion χ^2

Thus, VPB in patients with SBP levels were less likely to have a dipper profile compared to patients with SVPB (30.0% versus 47.3%, $p = 0.048$), whereas the night-peaker daily enrollment rate was significantly higher (16.0% versus 5.4%, $p = 0.047$). According to the daily DBP profile, more significant disorders were also identified in the group of patients with VPB: non-dipper type ($p = 0.0003$) was registered in the vast majority of patients (76.0%), while dipper type was only in 18.0% of patients ($p = 0.008$). The revealed changes indicate more significant abnormalities of the diurnal BP pattern in patients with stage II EH compared with patients with SVPB in both SBP and DBP profile, which to some extent coincides with the results of other researchers [5, 6, 8]. However, it should be noted that the violation of the daily profile of DBP according to our data was associated with the presence of frequent PBs in patients with stage II EH, and was more unfavorable in the prognostic plan of ventricular rhythm disorders. The obtained data indicate the need for separate analyzes of circadian disorders of the daily profile of blood pressure at the levels of both SBP and DBP in patients with EH. The presence of a certain association between extrasystolic arrhythmia, including VPB, with disorders of the DBP daily profile requires further investigation and analysis.

Thus, our study suggests that patients with II stage EH and frequent PB have higher values of both SBP and DBP during the day, which was accompanied by a violation of the daily profile of BP, mainly by non-dipper type of DBP. In patients with stage II EH and VPB, these changes were more pronounced compared with patients with CVPB. Based on these data, it cannot be excluded that the pathogenetic mechanisms involved in the regulation of the daily profile of blood pressure are responsible for the development of electrical instability of the myocardium in patients with EH.

Conclusions

1. In patients with EH and PB (regardless of its topical variant), compared to patients with EH without cardiac arrhythmias, significantly higher levels of blood pressure were registered, namely SBP, DSBP, NSBP, DBP, DDBP, NDBP, NPBP and HI SBP ($p < 0.02$). Significantly higher values of daytime and nighttime SBP ($p < 0.05$) and increased variability of nighttime and daytime DBP ($p < 0.05$) were found in the group of patients with stage II EH and VPB ($p < 0.05$) relative to the corresponding parameters in patients with SVPB.

2. In patients with stage II EH, irrespective of the presence of arrhythmia, there was a violation of the daily profile of BP by the level of SBP, with an increase in the number of pathological types and a decrease in the dipper type, but without a significant difference between the groups. However, in the group of patients with stage II EH with PBs, the pathological profile of non-dipper was significantly more frequently reported by the level of DBP (56.5% vs. 34.4%, $p = 0.03$).

3. The presence of VPB in patients with stage II EH was accompanied by a significant ($p < 0.05$) decrease in dipper diurnal profile and an increase in the night-peaker profile by SBP and a non-dipper type predominance by DBP in 76.0% of patients ($p = 0.0003$).

4. The data obtained indicate a certain associative relationship between the violation of the diurnal BP profile, mainly DBP, and the presence of PBs, namely, in patients with stage II EH. Therefore, we can assume that the pathogenetic mechanisms involved in the regulation of the daily profile of blood pressure are responsible for the development of electrical instability of the myocardium in patients with EH.

Further studies in this area will improve the diagnosis and optimize the treatment of patients with heart disease, decrease the vascular risk and improve the prognosis of this rather severe category of patients with the aim of establishing

associative links between circulatory disorders and the emergence of arrhythmias, pathogenetic mechanisms of blood pressure regulation disorders and the appearance of electrical instability of the myocardium.

References

1. Doshchicyn VL. Lechenie bolnykh s zheludochkovymi aritmiyami. Russkiy meditsinskiy zhurnal. 2011; 18: 736-39. [in Russian]
2. Sirenko JM. Hipertonichna khvoroba: dovidkove vydannia. Kyiv: Zdorovya; 2013. 240 s. [in Ukrainian]
3. Sirenko JM. Rekomendatsii ESC IESH z likuvannia arterialnoyi hipertenzii. Kyiv: Zaslavskiy OYu; 2019. 204 s. [in Ukrainian]
4. Svischenko JP, Mischenko LA. Nova kontseptsiya otsinky sertsevo-sudynnoho ryzyku za freminhemskymy kryteriyamy – vyznachennia viku sudyn. Pershyi dosvid vykorystannia v ukrainskii populatsii khvorykh na arterialnu hipertenzii. Ukrainskyy kardiologichnyi zhurnal. 2015; 5:95-103. [in Ukrainian]
5. Bogun FM, Crawford TC, Latchamsetty R. Ventricular arrhythmias in apparently normal hearts. Clinics review articles. 2016; 503-11.
6. Chopra HK, Chandra Praveen, Wander GS, Kumar Viveka. Atrial fibrillation update: a textbook of cardiology. 2017; 17:75-82.
7. Kuzminova NV, Ivankova AV, Lozinsky SE, Knyazkova II, Kulchytska OM, Gavriluk AO. State of kidney function and features of metabolic status changes in patients with different forms of extrasystols. Svit medicinu ta biologii. 2019; 3(69): 83-9. <https://doi.org/10.26724/2079-8334-2019-3-69-83-89>
8. Lip G, Coca A, Kahan T, Boriani G, Manolis AS, Olsen MH. [et al.] Hypertension and cardiac arrhythmias: a consensus document from the EHRA and ESC Council on Hypertension, endorsed by the HRS, Asia-Pacific Heart Rhythm Society APHRS and SOLEACE. Europace. 2017; 19 (6): 891-911. <https://doi.org/doi:10.1093/europace/eux091>.
9. Mann DL, Felker MG. Heart failure. A companion to braunwald's heart disease. 2014; 12: 195-218.
10. Purmah Y, Proietti M, Laroche C, Mazurek M, Tahmatzidis D, Novo S. Rate vs. rhythm control and adverse outcomes among European patients with atrial fibrillation. Europace. 2017; 19 (3): 241-50. PMID: 28160483. DOI: 10.1093/europace/euw421.
11. Zeng Z, Zhou R, Lian O. Comparison of arrhythmias different left ventricular geometric patterns in essential. J. Tongji. Med. Univ. 2011; 21(2): 93-6.

Реферат

ХАРАКТЕР ПОРУШЕНЬ ДОБОВОГО ПРОФІЛЮ АРТЕРІАЛЬНОГО ТИСКУ У ХВОРИХ НА ГІПЕРТОНІЧНУ ХВОРОБУ ІІ СТАДІЇ ТА ЧАСТОЮ ЕКСТРАСИСТОЛІЄЮ

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Обстежено 156 хворих (65 чоловіків та 91 жінка) на гіпертонічну хворобу ІІ стадії (ГХ ІІ). Основну групу склали 124 з них, які за даними добового моніторингу електрокардіограми мали часту суправентрикулярну (СВЕ) (74 особи) або шлуночкову екстрасистолію (ШЕ) (50 осіб). В групу порівняння увійшли 32 хворих на ГХ ІІ ст. без аритмії. Встановлено, що у хворих на ГХ ІІ та екстрасистолією спостерігались достовірно вищі величини систолического (САТ) та діастолічного артеріального тиску (ДАТ) протягом доби за даними добового моніторингу артеріального тиску (АТ). У хворих на ГХ ІІ незалежно від наявності аритмії спостерігалось зменшення пацієнтів з типом dipper та зростанням кількості патологічних типів добового профілю за рівнем САТ без суттєвої різниці між групами. У хворих на ГХ ІІ із екстрасистоліями достовірно ($p=0,03$) частіше реєстрували добовий профіль non-dipper за рівнем ДАТ. Наявність часті ШЕ асоціювалась з переважанням профілю non-dipper за рівнем ДАТ (у 76,0 %, $p=0,0003$) порівняно із хворими із СВЕ. Отримані дані свідчать про певний асоціативний зв'язок між порушенням добового профілю АТ, переважно ДАТ та наявністю екстрасистолій, а саме ШЕ у хворих на ГХ ІІ стадії.

Ключові слова: гіпертонічна хвороба, суправентрикулярна екстрасистолія, шлуночкова екстрасистолія, добове моніторингу артеріального тиску, добовий профіль артеріального тиску.

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ХАРАКТЕР НАРУШЕНЬ СУТОЧНОГО ПРОФІЛЮ АРТЕРІАЛЬНОГО ДАВЛЕННЯ У БОЛЬНИХ ГІПЕРТОНІЧЕСКОЙ БОЛЕЗНЬЮ ІІ СТАДИИ И ЧАСТОЙ ЭКСТРАСИСТОЛИЕЙ

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Обследовано 156 больных (65 мужчин и 91 женщина) гипертонической болезнью ІІ стадии (ГБ ІІ). Основную группу составили 124 из них, которые по данным суточного мониторинга электрокардиограммы имели частую суправентрикулярную (СВЭ) (74 человека) или желудочковую экстрасистолію (ЖЭ) (50 лиц). В группу сравнения вошли 32 пациента с ГБ ІІ ст. без аритмии. Установлено, что у больных ГБ ІІ и экстрасистоліей наблюдались достоверно более высокие величины систолического (САД) и диастолического артериального давления (ДАД) в течение суток по данным суточного мониторирования артериального давления (АД). У больных ГБ ІІ независимо от наличия аритмии наблюдалось уменьшение пациентов с типом dipper и увеличение количества патологических типов суточного профиля по уровню САД без существенной разницы между группами. У больных ГБ ІІ с экстрасистоліями достоверно ($p=0,03$) чаще регистрировали суточный профиль non-dipper по уровню ДАД. Наличие частой ЖЭ ассоциировалось с превалированием профиля non-dipper по уровню ДАД (у 76,0 %, $p=0,0003$) по сравнению с больными с СВЭ. Полученные данные свидетельствуют об определенной ассоциативной связи между нарушением суточного профиля АД, преимущественно ДАД и наличием экстрасистоліей, а именно ЖЭ у больных ГБ ІІ стадии.

Ключевые слова: гипертоническая болезнь, суправентрикулярная экстрасистолія, желудочковая экстрасистолія, суточное мониторирование артериального давления, суточный профиль артериального давления

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