Table 4

Annual incidence of the population of territories of RS (Ya) of lung cancer for 2001-2010. (on 100 thousand population)

Zone RS(Ya)	All population		Men		Women	
	RI	SIw	RI	SIw	RI	SIw
Polar	38,7±2,0	45,2±7,4	50,5±3,3	66,4±3,8	26,8±2,4	28,5±2,4
East	30,4±1,8	30,8±5,6	47,6±3,2	54,2±3,4	12,0±1,6	11,7±1,6
Western	35,1±1,9	39,2±9,7	38,3±2,9	47,5±3,2	31,9±2,6	32,2±2,6
Central	29,8±1,8	36,9±7,5	37,6±2,8	52,6±3,4	22,2±2,1	24,2±2,2
Southern	49,7±2,3	46,7±5,0	74,4±4,0	84,1±4,3	25,4±2,3	20,3±2,0
Big cities	31,5±1,8	36,3±2,8	50,0±3,3	68,9±3,9	14,4±1,7	15,3±1,8
RS (Ya)	33,8±1,9	38,6±2,0	48,3±3,2	63,9±3,7	19,9±2,0	20,2±2,0

Explanatory note: RI - rough index, SIw - the standardized (world) indicator;* – distinction statistically is significant in comparison with men ($p < 0.05$).

Table 5

Components of an increase of number of again revealed patients with lung cancer in RS(Ya) from 2001 to 2010, (% of a datum level)

Localization of a tumor	General increase	Including in connection with change	
		of number and age structure of the population	of risk of disease
Men			
All new growths - (C00 – 97)	6,67	4,74	1,93
Lungs (C33, 34)	2,36	1,03	1,33
Women			
All new growths - (C00 – 97)	9,62	9,71	-0,09
Lungs (C33, 34)	-4,76	0,87	-5,62

influence of “risk to fall ill” factor (-5.62).

CONCLUSION

Thus, to achieve positive results aimed at perfection of “oncoepidemiological” situation in the Republic Sakha it’s necessary to pay a special attention to a negative demographic process and to intensity an effort to get rid of a risk factor to increase MT morbidity.

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ORIGINAL RESEARCHES

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VARIATIONS OF HOMEOSTASIS PARAMETERS IN HYPERTENSIVE PATIENTS

ABSTRACT

The aim of the study was analysis of the effectiveness of targeted antihypertensive treatment based and are not based on the correction of sympathicotonia in patients suffering from arterial hypertension, with choleric and sanguine temperament, and the activity of the renin-angiotensin-aldosterone system in phlegmatic and melancholic, for example, reduction of total cholesterol, total fraction of lipoproteins of low and very low density, the value of atherogenic index and increase in high density lipoprotein and magnesium in the blood serum. It is established that the content of magnesium and atherogenic lipid fractions, and the proportion of persons with complications in terms of antihypertensive therapy and, moreover, is not associated with the correction features of psychosomatic status, highanxiety phlegmatic and melancholic persons are at high risk of developing complications of hypertension.

Keywords: hypertension, magnesium, lipids, variants of antihypertensive therapy.

INTRODUCTION

In the structure of morbidity and mortality of the working age population cardiovascular diseases (CVD) occupy the first position. Currently, researchers identify a number of factors influencing the course and outcome of hypertensive (AH) and coronary heart disease (CHD) [6, 8, 9, 13]. It is known that some patients had a combination of hypertension with atherosclerotic defeat of vessels of heart and brain [4, 6]. On the other hand, a number of factors, including changes in the concentration of sodium, potassium, calcium, and magnesium (Mg) in the blood significantly affect the course of CVD. Deficiency of Mg can play a key role in the development of CVD [15]. But different people the severity and clinical features GB different that requires a customized approach in treatment and examination of patients [3].

The aim of the study was to examine concentration of magnesium and blood lipids in patients with AH-II men before and during treatment two variants of antihypertensive therapy (AHT) is empirical and focused on locking down some of the characteristics of patients with different temperament and level of anxiety.

MATERIAL AND METHODS

In the period from 1999 to 2012 in terms of the clinics surveyed 848 technical officers – men aged 44 to 62 years (average 54±1.8 years) who are diagnosed with hypertension, stage II (GB-II, grade 2, risk 3). Disease duration was on average 11.6±1.4 years. The presence of essential hypertension was established according to the criteria set forth in [8, 9]. Among the examined there were no manifestations of comorbidity. Controls were 422 healthy men, compatible on basic anthropo-social indicators. All analyses were performed 8.00 to 10.00 in the morning on an empty stomach. The prevailing temperament – choleric (Ch) sanguine (Sg), phlegmatic (Ph) and melancholic (M) is determined using a psychological test [10] by 3 times testing before treatment (0) and after 3, 6, 9, 12 and 18 months of AHT. Direct analogy with the personality of type "A", "B" or "D" not found [11]. The amount of reactive (RA) and personal (PA) anxiety was determined according to [14]. The differences between RA and PA were not reliable. To lowanxiety (LA) defined as those who scored 32,0±0,6 points, to high anxiety (HA) – between 42.8 ±0.4 points and above. The presence of depression was determined by the method of Je.R. Akhmetzhanov [2], where the condition without depression, I think from 20 to 50 points from 51 to 59 –

Table 1

The content of magnesium and HDL in the blood in patients with AH-II men after 12 and 18 months of treatment without edema (1; 2) and relief (1a; 2a) prevalence of SNS in the Ch and RAAS (aldosterone), Ph and M-patients during the study period f rom 1999 to 2012 (p<0.05)

Months AGT			Highanxiety					Lowanxiety			
			0	12	18	healthy		0	12	18	healthy
Magnesium, mmol/l	Ch	1 50	0,98±0,02	1,02±0,02	1,03±0,02	1,16±0,01 50	2 50	1,09±0,02	1,27±0,02	1,38±0,02	1,39±0,01 50
		1a 50		1,14±0,02	1,18±0,02		2a 52		1,38±0,01	1,49±0,02	
	Sg	1 52	0,89±0,02	0,96±0,02	0,98±0,01	1,04±0,03 51	2 54	1,00±0,02	1,18±0,02	1,27±0,02	1,24±0,01 51
		1a 54		1,03±0,02	1,05±0,02		2a 52		1,29±0,01	1,38±0,02	
	Ph	1 58	0,8±0,02	0,86±0,02	0,89±0,01	0,92±0,03 60	2 61	0,97±0,02	1,02±0,02	1,07±0,02	1,08±0,01 60
		1a 61		0,94±0,02	0,96±0,02		2a 56		1,12±0,01	1,18±0,02	
	M	1 50	0,68±0,02	0,72±0,02	0,74±0,01	0,80±0,03 50	2 50	0,82±0,02	0,91±0,02	0,96±0,02	0,98±0,01 50
		1a, 50		0,84±0,02	0,87±0,02		2a 50		1,03±0,01	1,07±0,02	
HDL, mmol/l	Ch	1	1,5±0,002	1,58±0,003	1,65±0,002	1,8±0,003	2	1,80±0,002	1,83±0,002	1,87±0,002	2,0±0,003
		1a		1,66±0,003	1,76±0,007		2a		1,88±0,003	1,98±0,007	
	Sg	1	1,3±0,003	1,40±0,005	1,46±0,004	1,5±0,005	2	1,59±0,002	1,64±0,005	1,68±0,004	1,8±0,005
		1a		1,46±0,003	1,54±0,003		2a		1,69±0,003	1,80±0,003	
	Ph	1	1,2±0,003	1,28±0,005	1,33±0,004	1,4±0,004	2	1,42±0,003	1,45±0,005	1,50±0,004	1,6±0,004
		1a		1,32±0,003	1,39±0,07		2a		1,52±0,003	1,57±0,07	
	M	1	1,1±0,002	1,17±0,005	1,21±0,004	1,3±0,004	2	1,24±0,002	1,27±0,005	1,31±0,004	1,45±0,004
		1a		1,20±0,003	1,25±0,07		2a		1,32±0,003	1,37±0,07	

Note: here and further in the denominator indicated the number of surveys.

Table 2

The OH content in the blood and of IA in patients with AH-II men after 12 and 18 months of treatment without edema (1; 2) and relief(1a; 2a) prevalence of SNS in the Ch and RAAS (aldosterone), Ph and M-patients during the study period from 1999 to 2012 ($p<0.05$)

Months AGT			Highanxiety					Lowanxiety			
			before treatment	12	18	healthy		before treatment	12	18	healthy
OH, mmol/l	Ch	1 50	5,4±0,02	5,30±0,02	5,10±0,02	4,9±0,01 50	2 50	5,09±0,02	4,89±0,02	4,78±0,02	4,5±0,01 50
		1a 50		5,06±0,02	4,87±0,02		2a 52		4,76±0,01	4,55±0,02	
	Sg	1 52	5,8±0,02	5,6±0,02	5,5±0,01	5,2±0,03 51	2 54	5,29±0,02	5,17±0,02	5,08±0,02	4,8±0,01 51
		1a 54		5,3±0,02	5,2±0,02		2a 52		4,94±0,01	4,69±0,02	
	Ph	1 58	6,2±0,02	6,08±0,02	5,86±0,01	5,5±0,03 60	2 61	5,65±0,02	5,48±0,02	5,30±0,02	5,0±0,01 60
		1a 61		5,76±0,02	5,49±0,02		2a 56		5,27±0,01	5,08±0,02	
	M	1 50	6,7±0,02	6,38±0,02	6,16±0,01	5,9±0,03 50	2 50	6,09±0,02	5,94±0,02	5,74±0,02	5,4±0,01 50
		1a 50		6,08±0,02	5,77±0,02		2a 50		5,60±0,01	5,38±0,02	
IA, c.u.	Ch	1	2,57±0,002	2,32 ± 0,02	2,09± 0,03	1,9± 0,002	2	1,83±0,002	1,67±0,02	1,56±0,03	1,2±0,03
		1a		2,05 ±0,03	1,78 ±0,02		2a		1,53±0,03	1,27±0,02	
	Sg	1	3,26±0,002	3,0 ± 0,02	2,75± 0,03	2,4± 0,002	2	2,33±0,002	2,15±0,02	2,05±0,03	1,6±0,02
		1a		2,68 ±0,03	2,37 ±0,02		2a		1,92±0,03	1,63±0,02	
	Ph	1	3,92±0,001	3,75 ± 0,02	3,41 ± 0,01	2,9± 0,001	2	3,00±0,001	2,79±0,02	2,53±0,01	2,2±0,01
		1a		3,36 ±0,03	2,95 ±0,02		2a		2,47±0,03	2,24±0,02	
	M	1	4,83±0,001	4,45 ± 0,02	4,09 ± 0,01	3,7± 0,001	2	3,91±0,001	3,68±0,02	3,39±0,01	2,9±0,01
		1a		4,06 ±0,03	3,62 ±0,02		2a		3,24±0,03	2,91±0,02	

Note: before treatment, the content of OH and IA have 1 and 1A (2 and 2a) are the same.

mild depression; the latter is marked only HA/Ph and HA/M. According to the conclusion of psycho HA-patients in-patient treatment is not needed. HA/Ch and HA/Sg were prescribed anxiolytic (Ax), and HA/Ph and HA/M is an antidepressant (Ad), except for drivers. From Ax at 96% was administered sibazon 2.5 mg in the morning and at night. From Hell is the experience of the use of antidepressants in the treatment of patients with arterial hypertension with disorders of the affective spectrum [1] 96% appointed coaxil 12.5 mg morning and night (in 4% of cases the zoloft at 25 mg/day). Appointment Ax and Ad of a driver and LA are not shown [12, 13]. The values of the initial vegetative tonus testified that Ch and Sg prevailed sympathetic (SNS) and Ph and M – parasympathetic (PSNS) is a division of the autonomic nervous system (ANS) [13].

The content of Mg in the blood serum was determined according to the method of Gindler, Heth, Khayam-Bashi through the use of biochemical reagents "BIOLABO" (France). Calmagite (metallochromic indicator) forms a colored complex compound with magnesium in the environment of the base [5]. The contents of serum total cholesterol (OH) were determined by enzymatic methods with the use of proprietary sets "CentrifiChem-600", and the content of cholesterol of high density lipoproteins (HDL) was determined after pre-deposition total fraction of lipoproteidov low (LDL) and very low (VLDL) density on the auto-analyzer "Technicon-AAII". The content of LDL was calculated by the formula: OH – HDL – VLDL where VLDL = triglycerides/2,181 [7]. We calculated the atherogenicity index (IA) [8, 9].

The effectiveness of the empirical variant of AHT (E-AHT) and targeted (T-AGT) for the relief of sympathicotonia have Ch and Sg, and the activity of the renin-angiotensin-aldosterone system (RAAS) was judged by the degree of alignment of the content of Mg and lipids with those in HA(LA)-healthy persons of corresponding temperament and proportion (%) of persons with acute cerebrovascular accident (CVA) and acute myocardial infarction (AMI) in patients.

Substantiation of variants of AGT. In the beginning of the study (1999 – 2004) the appointment of agents of AHT was empirical. From 2004 to 2012, the appointment of AHT was performed according to the order No. 254 of the Ministry of health and social development of the

Table 2

The content of total fraction of LDL+VLDL in blood serum in patients with AH-II men after 12 and 18 months of treatment without edema (1, 2) and with mild SNS Ch and Sg as well RAAS (aldosterone), Ph and M (1a, 2a) for the period from 1999 to 2012 (p<0.05)

Months AGT			Highanxiety					Lowanxiety				
			0	12	18	healthy		0	12	18	healthy
The total fraction of LDL+VLDL, mmol/l	X	1	3,91± 0,001	3,67±0,01	3,44±0,02	3,2±0,01	2	3,29± 0,001	3,07±0,02	2,92±0,03	2,5±0,01
		1a		3,40 ±0,01	3,19±0,01		2a		2,88±0,03	2,57±0,04	
	C	1	4,43± 0,001	4,18±0,01	4,04±0,01	3,7±0,01	2	3,70± 0,001	3,53±0,02	3,40±0,02	2,9±0,01
		1a		3,91±0,01	3,64±0,01		2a		3,25±0,03	2,92±0,07	
	Ф	1	4,90± 0,001	4,81±0,01	4,53±0,02	4,1±0,01	2	4,23± 0,001	4,03±0,02	3,82±0,01	3,5± 0,001
		1a		4,44±0,04	4,10±0,02		2a		3,75±0,02	3,55±0,06	
	M	1	5,52± 0,001	5,22±0,03	5,15±0,01	4,6±0,01	2	4,85± 0,001	4,67±0,03	4,45±0,03	3,9±0,01
		1a		4,88±0,05	4,63±0,02		2a		4,27±0,02	4,03±0,06	

Note: the number of examined table. 2.

Russian Federation dated 22.11.2004 (6 groups of drugs for the treatment of hypertension) [7]. However, analysis of the effectiveness of AHT showed that the incidence of complications in groups with the activity of the SNS-Department from HA/Ch and HA/Sg, treated with β-adrenoblockers (BAB) and a diuretic (D), and HA/Ph and HA/M(Sg) with the activity of the RAAS (aldosterone) and PSNS-section of VNS-treated angiotensinase enzyme inhibitors (aceis) + D were lower than in the groups treated with "empirical" AHT, in which drugs and doses are the same, but Ch and Ag took aceis+D, Ph and M – BAB+D. Thus, in the basic group, HA/Ch and HA/Sg-patients due to SNS-tonia received BAB, in 96% of cases – metoprolol (HA/Ch and HA/Sg at 200 mg/day (4% of its analogues) and LA/Ch, LA/Sg for 100 mg/day) and D (hydrochlorothiazide): HA/Ch and HA/Sg at 25 mg/day and LA – 12.5 mg/day. Have HA(LA)/Ph and HA(LA)/M as the main group the content of aldosterone was higher and cortisol lower than that of HA(LA)/Ch and HA(LA)/Sg, which was interpreted as the prevalence of RAAS (aldosterone), Ph and M in comparison with the hypothalamic-pituitary-adrenal system (cortisol), and Ch and Sg versa [12, 13]. It explains the purpose of the HA/Ph and HA/M-patients on the background of the PSNS-tonia and prevalence of activity in the RAAS (aldosterone) iace, 96% of the enalapril 20 mg/day (4% similar) + verospiron 100–200mg/day (75%), rarely (25%) and hydrochlorothiazide 25 mg/day, because the content of potassium in the blood have been lower than those of Ch and Sg. LA/Ph LA/M were administered enalapril 10 mg/day + hydrochlorothiazide (hydrochlorothiazide) - 12.5 mg/day. All patients were receiving panangin 2 tablets./day and cardiomagnyl on 1 tab./day. Exactly the same patients of the comparison groups received the same list of drugs in the same doses, but Ch and Sg an ACE-I, and Ph and M – BAB.

The results obtained were considered in 3, 6, 9, 12 and 18 months of AHT and processed by methods of variation statistics (M±M) using standard software package "Statistica 6.0" and the parametric student's t–test. Were considered as statistically significant values at p<0.05. This paper presents data before treatment (0) and after 12 and 18 months of AHT. The study was performed in compliance with the Helsinki Declaration, examination and treatment of the people and approved by the ethics Committee of the Novosibirsk state medical University 20.11.2009, protocol №18.

The results of the study and their discussion. We found that in patients before and during AHT, as well as in healthy persons the content of Mg in the blood significantly and consistently lower in the "temperamental" row: HA(LA)/Ch – Sg – Ph – M. The content of Mg was significantly lower than in La, and HA(LA)-patients is lower than in healthy HA(LA) persons of a corresponding temperament (table.1). It should be noted that the HA/Ph and HA/M the lowest content of Mg in the blood before treatment and only they have discovered depression mild neurogenic nature [12, 13].

The contents of the paps before and during treatment was significantly reduced in the same sequence as the magnesium content Ch > Sg > Ph > M. in contrast, the content of OH total fraction of LDL+VLDL in the blood and the amount of IA in the same row was significantly increased: M > Ph > Sg > Ch (table. 1-3). The obtained data suggest that the decrease in the content of insulin and aldosterone in row M > Ph > Sg > Ch combines the reduction of atherogenic lipid fractions and the magnitude of IA (table. 2).

The identified differences may indicate possible higher risk of atherosclerosis, "hypertension" HA/Ph and HA/M. Despite of AHT, the highest proportion of patients who have suffered complications of hypertension

in stroke and AMI happened to be in the group HA/Ph and HA/M. on the one hand, these differences indicate the specific manifestation of complications depending on the prevailing temperament, and on the other are likely to speak in favor of a combination of GB and atherosclerosis mainly in HA/Ph and HA/M. At the same locus minoris resistentio are often cerebral, and coronary vessels. From LA-patients given the lower lipid content of atherogenic fractions and less severe emotional reactions to environmental factors, the ratio of stroke/AMI patients was lower than in HA-patients the appropriate temperament that convinces you of the necessity of taking into account high and low anxiety and the relief of high anxiety in order to prevent possible complications.

Summing up, it should be noted that the lowest content of Mg and HDL in the blood in combination with the highest (of all the surveyed persons) content OH, LDL+VLDL in the same environment and ended up with HA/Ph and HA/M-patients. And this despite the fact that all patients received cardiomagnyl in the above mentioned dose. In turn, you might need to prescribe drugs of magnesium in higher therapeutic doses, using magnerot specified in [15] or its analogues.

The efficiency of AHT. As shown by our study, in contrast to the empirical version of AHT, treatment option T-AHT 18 months reliably brought the Mg content, OH, total fraction LDL+VLDL and HDL to that in healthy HA(LA)-persons of a corresponding temperament (table. 1 – 3). It would be less noticeable, if not significantly lower the proportion of persons with stroke and AMI in the groups HA(LA)-»temperaments», took option T-AHT. The ratio of the proportion of individuals with AMI, stroke groups showed the presence of three-fold prevalence of AMI on stroke in groups HA/Ph and HA/M. In addition, after a year of treatment under option T-AHT values of the studied parameters and the IA were what they were only after a further 6 months of treatment under option E-AHT in patients of comparison group (table. 1 – 3). That is, by a variant of the T-AHT for 6 months before they managed to reduce the risk of complications.

CONCLUSION

1. The content of Mg and atherogenic lipid fractions (OH, the total fraction of LDL+VLDL), as well as the proportion of persons with complications in terms of AHT associated and, moreover, is not associated with the correction features of psychosomatic status, HA/Ph and HA/M-patients are individuals at high risk of developing complications of hypertension. Compared to HA(LA)-patients of the values of the studied parameters is more preferable, suggesting the need for relief of high anxiety.

2. In contrast to Ch and Sg, the high lipid content of atherogenic fractions from HA/Ph and M combined not only with the highest level of complications, but three times the prevalence of AMI, stroke over (as a 3/1).

3. Compared to AHT without the relief features of the PSS, the effect of treatment based on the relief features of temperament (activity SNS division of the ANS for Ch and Sg and the RAAS aldosterone – Ph and M) appeared 6 months earlier, and the values of the studied parameters was significantly closer to typical for healthy persons of corresponding temperament and anxiety.

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INTRAPARTUM RISK AND NEWBORNS' HEALTH AFTER ABDOMINAL DELIVERY IN FULL CERVICAL DILATATION

ABSTRACT

Insufficient attention traditionally existing even in medical institutions that realize the principles of modern risk strategy impairs the perinatal outcomes. The birth outcomes in the newborns make up the main criterion for the implementation of accounting intrapartum risk factors. Since 2010 it is proved from a strong correlation between the growth of risk intrapartum and neonatal condition [EAGO, Lisbon, 2010; IN Kostin, 2012]. This study is undertaken in order to increase attention to the intrapartum risk factors, determining their contribution and force effects on birth outcomes.

Objective: to determine the main injuries in fetus and newborn delivered by cesarean section in full cervical dilatation.

We determined the threshold level of intranatal augmentation requiring changing labor management. The critical level of intranatal augmentation after abdominal delivery in full cervical dilatation is 82%. 41.7% of newborns with intranatal augmentation 82% and more need intensive care and resuscitation.

Keywords: pregnancy, perinatal risk factors, abdominal delivery.

The relevance of research

By the end of XX century in obstetric practice was the final formation of the perinatal risk strategy, aimed at preserving the life and health of the fetus and newborn. It was created

based on the study of factors affecting the level of perinatal morbidity and mortality, and the planning of measures to improve the outcomes of pregnancy and childbirth [1, 3].

As shown by numerous studies, the basis of many sorts, who had adverse outcomes for both mother and fetus, is underestimating or even ignoring the intrapartum risk factors (pathological preliminary period, meconium water anomalies of labor activity, etc.) [4, 5].

However, the new input in the scale factors and factors of intrapartum period led to an increase in the amount of risk points. The dynamic growth of the amount during pregnancy and during labor required to define any thresholds for clinical decision to change the tactics of pregnancy and childbirth. Convinced of the lack of effectiveness of modern electronic methods of fetal assessment, EAGO (2010) recommended the introduction of perinatal risk strategies to improve perinatal indicators. Underestimation of risk, and most importantly - it intrapartum component [2] can be one of the causes of the violation of the fetus and newborn.

Purpose of the study – to set the main health problems of fetuses and neonates recovered by caesarean section in full cervical dilatation.

MATERIALS AND METHODS

The objects of statistical research at various stages were 72 women who gave birth to the baby by cesarean section in full cervical dilatation.

The principle of the formation of the study group was typed score prenatal risk factors. To assess the