

RISK FACTORS FOR THE DEVELOPMENT OF ISCHEMIC STROKE IN THE BACKGROUND OF MYOCARDIAL INFARCTION

Shodmonova Sidika Kurbanovna,
Bukhara State Medical Institute

RELEVANCE

According to the World Health Organization, over 300 different risk factors for stroke and coronary heart disease (CHD) have been identified. Currently, there is an increase in strokes in able-bodied people under 64 years of age. Comparative pathomorphological studies carried out under the program of the World Health Organization at the beginning of this century demonstrated that the development of atherosclerosis proceeds more severely and at a younger age, causing MI and stroke up to 50-55 years. IHD doubles the risk of stroke, if there is an extensive anterior infarction, then the likelihood of stroke increases to 20%. The stroke itself, regardless of its type, can develop not only as a result of myocardial infarction, but also underlie it. Stroke increases the risk of cardiac events 3-4 times. Currently known main stratification factors of total cardiovascular risk in hypertensive patients have different significance for predicting the development of MI and stroke, many of them are more specific for MI, which indicates the need to search for new risk factors for the development of stroke [24, 30]. The risk factors for the combination of MI and IS, depending on the sequence of their development, have been little studied.

Purpose of the study:

To identify the leading risk factors for the development of ischemic stroke in combination with myocardial infarction

Comprehensive clinical examination of 105 patients. .

Study design

The selection criteria were: patients with ischemic stroke in combination with acute myocardial infarction (main group - OH); persons with ischemic stroke without myocardial infarction (comparison group - HS). Exclusion criteria: oncological and hematological diseases, severe renal, liver failure.

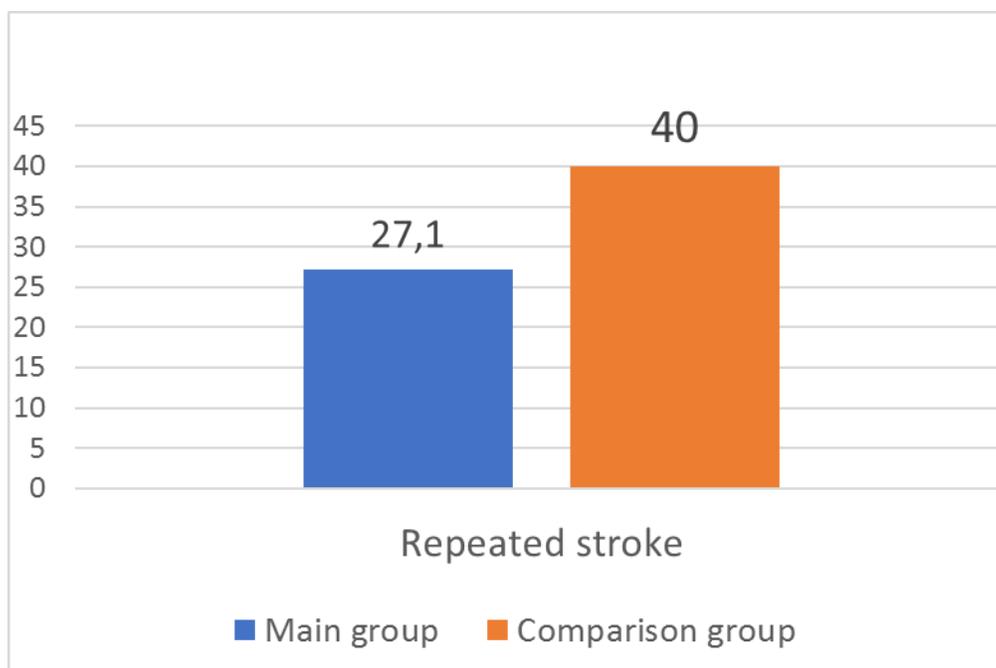
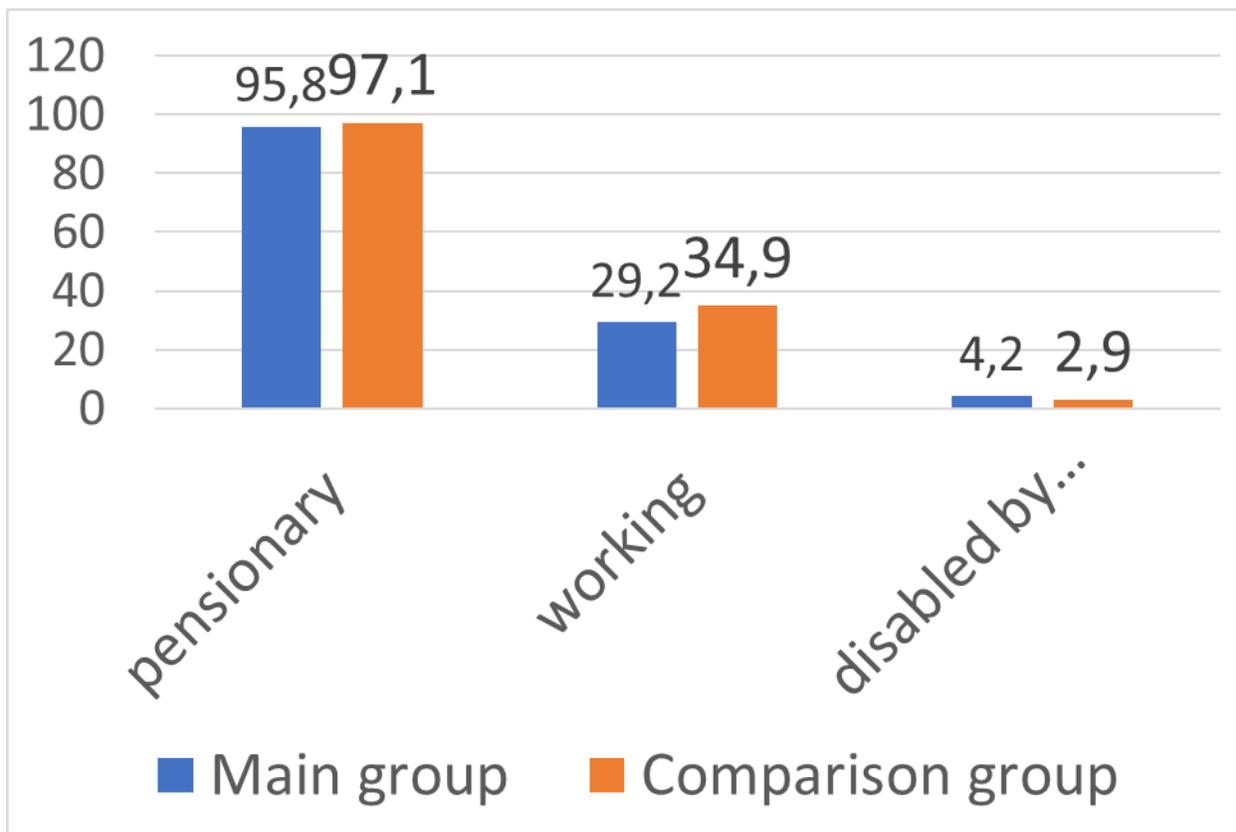
Main group 70 patients were MG with IS and MI, mean age - $73.2 \pm$

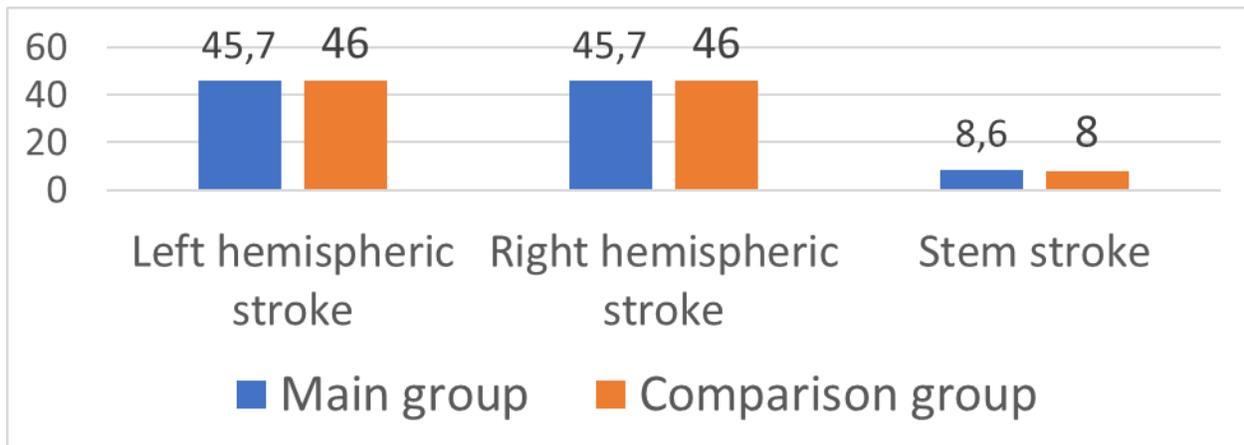
Comparison group 35 people with AI without MI, average age - 67.5 ± 4.5 years

In a comprehensive clinical examination, neurological, laboratory, ultrasound and neuroimaging methods were used, as well as formatted documentation with a detailed presentation of complaints, anamnestic information, subjective and objective signs of the disease, data from paraclinical studies. Risk factors for the development of cardiovascular diseases in patients with IS and MI (OH) have been studied in the gender aspect and in comparison with patients with IS without MI (HS), as well as depending on the sequence of stroke or MI. Statistical processing included the calculation of mean values and their standard errors. The results were considered reliable at $P < 0.05$.

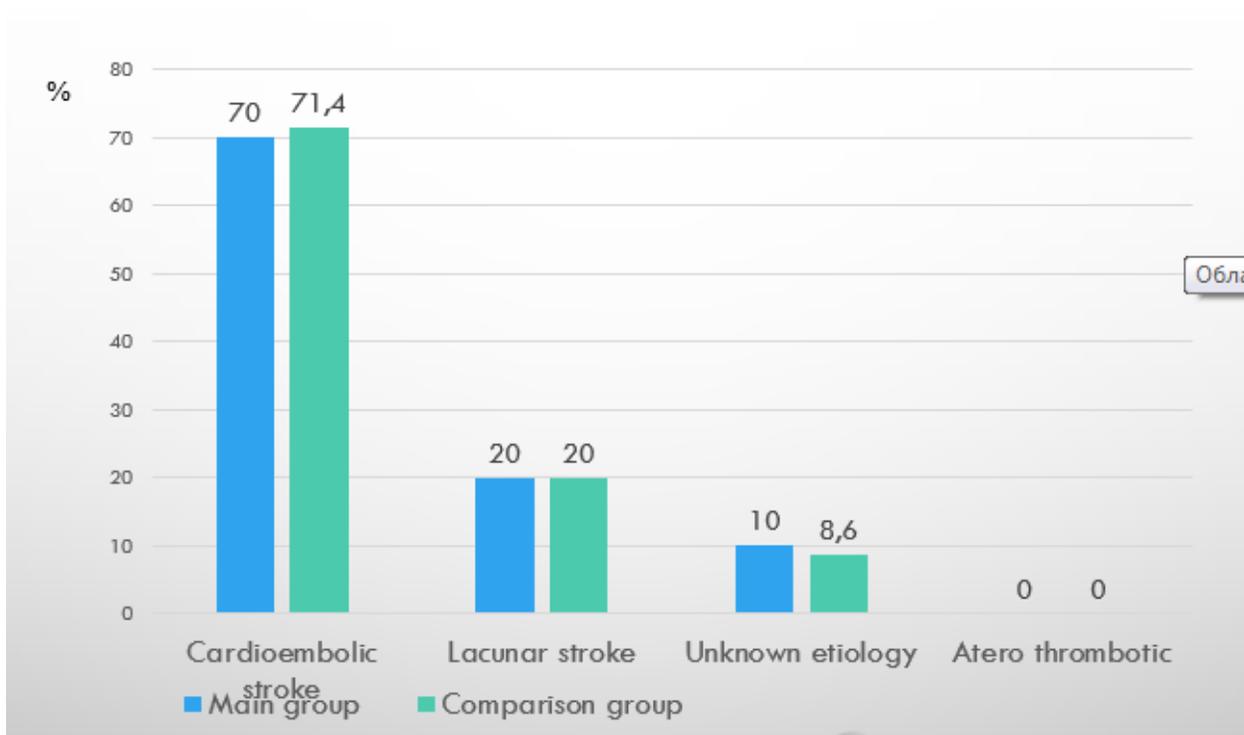
Social status of patients

The incidence and localization of recurrent strokes among the examined patients

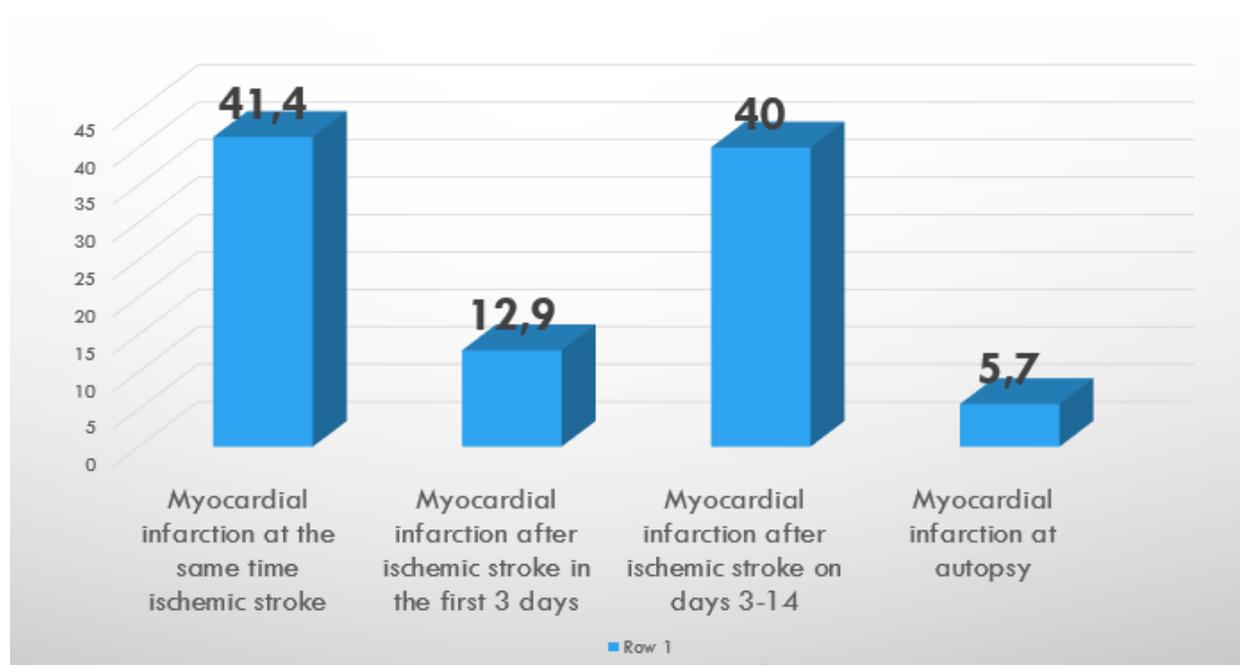




Prevalence of stroke by type



The timing of myocardial infarction in patients with ischemic stroke

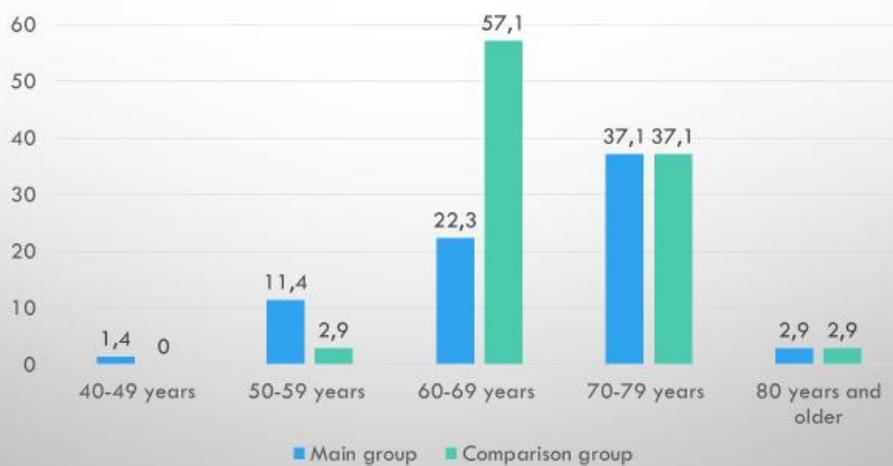


Distribution of patients by age and sex in the main group

Gender	40-49 years		50-59 years		60-69 years		70-79 years		80 years and above		All	
	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
F, (n = 43)	-	-	2*	2,78	6*	8,57	19*	27,14	16*	22,9	43**	61,4
M, (n = 27)	1	1,4	6*	8,57	11*	15,7	6*	8,57	3*	4,28	27**	38,6
All, (n = 70)	1	1,4	8	11,42	17	24,28	27	38,57	19	27,14	70	100

Note. Statistically significant differences: * - $p < 0.05$; ** - $p < 0.001$.

Distribution of patients by age in the compared groups



Duration of hypertension in patients of the main group and the comparison group, ... years

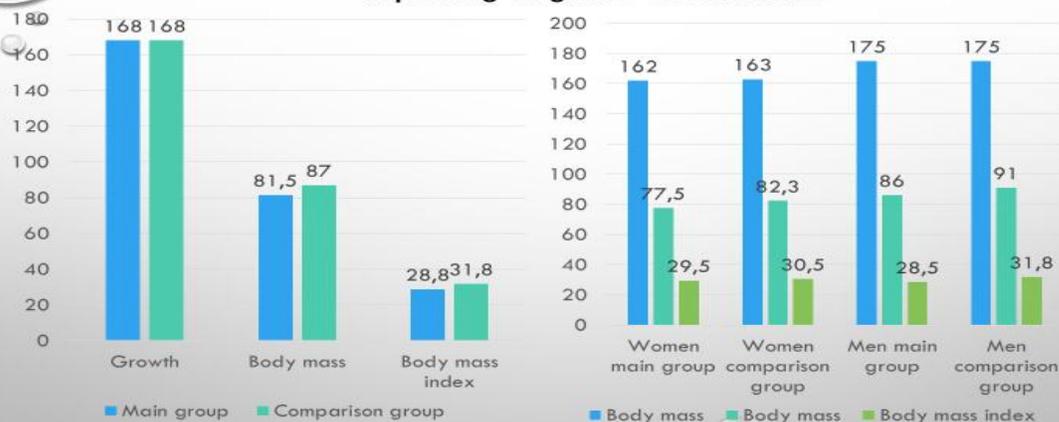
Groups	Males	Females	All	p Between M and F
MG (n = 70)	12,80 ± 5,26	22,54 ± 5,73	19,04 ± 6,62	<0,05
CG (n = 35)	7,70 ± 3,25	12,20 ± 2,91	9,09 ± 3,62	<0,5
p	<0,05	<0,02	<0,05	—

Gender differences in the lipid spectrum in patients of the main group and the comparison group

Groups	Gender	Cholesterol, mmol/l	HDL, mmol/l	LDL, mmol/l	AI
MG	F	5,65 ± 1,25	0,91 ± 0,28*	3,35 ± 0,13	5,87 ± 1,06**
	M	5,03 ± 1,42	0,98 ± 0,37	3,09 ± 0,62	4,57 ± 1,19
CG	F	5,54 ± 1,35	1,17 ± 0,32*	3,26 ± 0,77	3,33 ± 0,7**
	M	5,66 ± 1,66	0,99 ± 0,22	3,44 ± 0,28	4,97 ± 0,6

Note. Statistically significant differences: * - $p < 0.05$; ** - $p < 0.001$.

Anthropometric indicators of the examined patients depending on gender characteristics



Cardiovascular factors in men and women of the main group and the comparison group

Groups	Gender	AH		LVH		PICS		AF		VE		CHF	
		abs.	%	abs.	%	abs.	%	abs.	%	abs.	%	abs.	%
MG	Female (n = 43)	40	93,02	28	65,1	18	41,8	24	55,8	16*	37,2	30	69,7
	Male (n = 27)	24	88,9	22	81,5	12	44,4	14**	51,8	6*	22,2	23**	85,2
CG	Female (n = 12)	11	91,6	6	50,0	1	8,3	4	33,3	4	33,3	6	50,0
	Male (n = 23)	23	100,0	14	60,9	4	17,4	7**	30,4	1	4,3	5**	21,73

Note. Statistically significant differences: * - $p < 0.05$; ** - $p < 0.001$.

Prognostically significant indicators for the development of a combination of CVA and MI

CHF(PK - +5,4; Ik - 2,8)

PICS(PK - +4,9; Ik - 0,6),

VE (PK - +3,3; Ik 0,9),

AF- (PK - +2,9; Ik - 0,5),

AH (PK - +0,25; Ik - 0,2),

LVH(PK - +0,9; Ik - 0,2),

dyslipidemia (PK - +0,62; Ik - 0,04)

For women

VE (PK - +9,2; Ik - 2,9),

PICS(PK - +7,3; Ik - 2,6),

CHF(PK - +5,2; Ik - 2,5),

AF (PK - +2,6; Ik - 0,7).

For men

VE (PK - +7,1; Ik - 1,3),

CHF (PK - +5,9; Ik - 3,8),

PICS (PK - +4,07; Ik - 1,1),

AF(PK - +2,3; Ik - 0,5)

Conclusions:

- The leading risk factors for the development of ischemic stroke in combination with myocardial infarction, which occur in women twice as often as in men, are ventricular premature beats, post infarction cardio sclerosis, chronic heart failure, atrial fibrillation, as well as age over 70 years in women and over 60 in men, the duration of hypertension is more than 17 years in women and more than 7 years in men.
- When collecting anamnesis information in patients with ischemic stroke, a complex of risk factors for the development of a combination of stroke and myocardial infarction (post infarction cardio sclerosis, chronic heart failure, cardiac arrhythmias) should be identified and, if present, include patients in the high-risk group.