

GENDER CHARACTERISTICS OF PULSE PRESSURE AND HEART RATE IN PATIENTS WITH ARTERIAL HYPERTENSION DEPENDING ON THE AGE AND DIABETES MELLITUS

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Objective: the aim was to study peculiarities of HR and PP in patients of both sexes with AH depending on the age and presence of concomitant diabetes mellitus type 2 (DM2).

Material and methods: 70 males (M) and 68 females (F) suffering from AH underwent 24-hour electrocardiogram and blood pressure monitoring with subsequent average HR and PP calculation. Among all patients 36 M and 31 F had subcompensated DM2 (HbA1c - $7.3 \pm 0.8\%$). According to their age patients were divided into two study groups. 1 group (younger age M - 38.4 ± 4.2 yrs., F - 39.2 ± 3.8 yrs.) included 16 M + 18 F without and 18 M + 15 F with DM2. 2 group (older age M - 56.8 ± 6.4 yrs., F - 54.2 ± 5.2 yrs.) included 18 M + 19 F without and 18 M + 16 F with DM2.

Results. Elevation of PP and HR was associated with particular sex, age and presence of concomitant DM2. In the recent study the highest values of these variables were found in older females with both AH and DM2 (data are presented in table).

	Patients without DM2 (n=71)				Patients with DM2 (n=69)			
	Males		Females		Males		Females	
	1 group (n=16)	2 group (n=18)	1 group (n=18)	2 group (n=19)	1 group (n=18)	2 group (n=18)	1 group (n=15)	2 group (n=16)
PP (mm Hg)	42.3±2.7	44.3±2.7	40.8±3.3	48.2±2.4	48.2±3.1	52.3±3.1	44.1±2.7	58.2±2.7
HR (per 1 min)	72.4±1.4	74.3±2.7	70.8±2.3	74.8±3.4	76.2±2.4	82.2±2.6	76.6±3.1	88.3±3.2

Conclusion: In aging of female patients with arterial hypertension and diabetes mellitus both the heart rate and pulse pressure increases. This data demonstrate the raising of cardiovascular risk which requires tight control.