SUPPLEMENTAL MATERIAL

Smoking and Cardiac Structure and Function in the Elderly: The Atherosclerosis Risk in Communities (ARIC) Study

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Supplemental Tables

Supplemental Table 1. Echocardiographic morphological characteristics of the participants according to smoking status adjusted for attrition by inverse probability weighting.

Smoking status	Model 1			Model 2		
	Never	Former	Current	Never	Former	Current
LV end diastolic diameter, cm	4.36 ± 0.01	4.36 ± 0.01	4.33 ± 0.03	4.34 ± 0.01	4.34 ± 0.01	4.37 ± 0.03
LV end systolic diameter, cm	2.57 ± 0.01	2.58 ± 0.01	2.55 ± 0.03	2.56 ± 0.01	2.58 ± 0.01	2.58 ± 0.03
LV Posterior wall thickness, mm	9.3 ± 0.03	9.3 ± 0.03	9.3 ± 0.10	9.2 ± 0.03	9.2 ± 0.03	9.3 ± 0.10
Septal wall thickness, mm	10.4 ± 0.04	10.4 ± 0.04	10.5 ± 0.11	10.3 ± 0.04	10.3 ± 0.03	10.6 ± 0.11*[‡]
LV EDV, mL	80.3 ± 0.4	79.7 ± 0.4	77.2 ± 1.2*	79.7 ± 0.4	79.4 ± 0.4	78.1 ± 1.1
LV mass, g	145 ± 1	145 ± 1	145 ± 3	142 ± 1	143 ± 1	148 ± 3*
LV mass index, g/m^2	78.1 ± 0.4	77.6 ± 0.4	80.4 ± 1.1[‡]	77.1 ± 0.4	77.2 ± 0.4	80.6 ± 1.3*[‡]
LV mass/EDV ratio, g/mL	1.86 ± 0.01	1.88 ± 0.01	1.93 ± 0.03	1.85 ± 0.01	1.86 ± 0.01	1.95 ± 0.03[†‡]
Relative wall thickness	0.430 ± 0.002	0.430 ± 0.002	0.432 ± 0.005	0.428 ± 0.002	0.429 ± 0.002	0.430 ± 0.005
LV hypertrophy, %	11	10	15[‡]	10	10	16*[‡]
LV concentric hypertrophy, %	7	6	10[‡]	6	6	10[‡]
LV eccentric hypertrophy, %	4	4	5	4	4	6

LV concentric remodeling, %	40	42	37	40	43	36
LV normal geometry, %	49	48	48	50	47	48
LA volume index, mL/m^2	25.6 ± 0.2	25.8 ± 0.2	$24.8 \pm 0.4^{\ddagger}$	25.5 ± 0.2	25.7 ± 0.2	25.0 ± 0.4
RV end diastolic area, cm^2	19.4 ± 0.1	19.4 ± 0.1	$18.8 \pm 0.3^{*\ddagger}$	19.3 ± 0.1	19.3 ± 0.1	19.1 ± 0.3
RV end systolic area, cm^2	9.2 ± 0.1	9.2 ± 0.1	$8.8 \pm 0.2^{*\ddagger}$	9.1 ± 0.1	9.1 ± 0.1	9.0 ± 0.2

Legend. Continuous variables are presented as mean ± standard error. * $p<0.05$ and [†] $p<0.01$ vs. never smokers and [‡] $p<0.05$ vs. former smokers. LV – left ventricular; EDV – end-diastolic volume; LA – left atrial; RV – right ventricular.

Model 1: Adjusted for age, sex and race

Model 2: Further adjusted for body mass index, diabetes, anti-hypertensive medications, systolic blood pressure, current alcohol consumption, heart rate and carotid-femoral pulse wave velocity.

Supplemental Table 2. Echocardiographic functional characteristics of the participants according to smoking status adjusted for attrition by inverse probability weighting.

Smoking status	Model 1			Model 2		
	Never	Former	Current	Never	Former	Current
E/A ratio	0.83 ± 0.01	0.84 ± 0.01	0.86 ± 0.02	0.84 ± 0.01	0.83 ± 0.01	0.86 ± 0.02
E/E' ratio	11.3 ± 0.1	11.4 ± 0.1	11.9 ± 0.2*‡	11.2 ± 0.1	11.2 ± 0.1	12.0 ± 0.3†§
Global longitudinal LV strain (%)	-18.1 ± 0.1	-17.9 ± 0.1*	-17.9 ± 0.2	-18.1 ± 0.1	-18.0 ± 0.1	-18.0 ± 0.2
LV ejection fraction (%)	65.8± 0.1	65.6 ± 0.1	66.7 ± 0.4*§	65.8± 0.1	65.7 ± 0.1	66.7 ± 0.4*‡
RV fractional area change (%)	52.6 ± 0.2	52.6 ± 0.2	52.9 ± 0.6	52.6 ± 0.2	52.8 ± 0.2	53.1 ± 0.5
Tricuspid annulus PSV (cm/s)	12.0 ± 0.1	11.9 ± 0.1	11.7 ± 0.2	12.0 ± 0.1	11.9 ± 0.1	11.7 ± 0.2

Legend. Continuous variables are presented as mean ± standard error. * $p<0.05$ and † $p<0.01$ vs. never smokers and ‡ $p<0.05$ and § $p<0.01$ vs. former smokers. LV – left ventricular; E/A – early to late transmitral inflow velocity ratio; E/E′ - early transmitral inflow to early mitral relaxation velocity ratio; RV – right ventricular; PSV – peak-systolic velocity.

Model 1: Adjusted for age, sex and race

Model 2: Further adjusted for body mass index, diabetes, anti-hypertensive medications, systolic blood pressure, current alcohol consumption, heart rate and carotid-femoral pulse wave velocity