

Supplementary information

Serum FABP5 concentration is a potential biomarker for residual risk of atherosclerosis in relation to cholesterol efflux from macrophages

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Table S1

Table S1. Characteristics of the studied subjects without medication who underwent carotid ultrasound (n = 129)

	Total	Male	Female	P
n	129	44	85	
Age (years)	62 ± 13	64 ± 13	61 ± 12	0.241
Body mass index (kg/m ²)	22.6 ± 3.5	24.0 ± 3.9	21.9 ± 3.1	0.003
Waist circumference (cm)	82.7 ± 10.4	87.1 ± 10.1	80.4 ± 9.9	0.001
Systolic blood pressure (mmHg)	131 ± 22	134 ± 21	130 ± 22	0.325
Diastolic blood pressure (mmHg)	76 ± 11	77 ± 11	75 ± 12	0.285
Pulse rate (beats/min)	70 ± 10	68 ± 13	72 ± 8	0.060
Biochemical data				
Total cholesterol (mg/dl)	207 ± 30	192 ± 28	214 ± 28	< 0.001
LDL cholesterol (mg/dl)	124 ± 27	116 ± 28	129 ± 26	0.014
HDL cholesterol (mg/dl)	70 ± 19	60 ± 20	75 ± 16	< 0.001
Triglycerides (mg/dl)	81 (65-109)	92 (74-153)	76 (62-100)	0.002
Fasting glucose (mg/dl)	91 (86-97)	95 (90-104)	90 (86-95)	< 0.001
Insulin (μU/ml)	4.4 (3.2-6.3)	5.2 (3.2-7.3)	3.9 (3.1-5.8)	0.065
HOMA-R	1.00 (0.71-1.48)	1.28 (0.72-1.85)	0.87 (0.69-1.27)	0.034
HbA1c (%)	5.4 ± 0.4	5.6 ± 0.4	5.4 ± 0.3	0.006
Blood urea nitrogen (mg/dl)	15 ± 4	17 ± 5	15 ± 4	0.010
Creatinine (mg/dl)	0.7 ± 0.2	0.9 ± 0.2	0.7 ± 0.1	< 0.001
eGFR (ml/min/1.73m ²)	72.8 ± 13.9	73.4 ± 14.8	72.5 ± 13.5	0.737
Uric acid (mg/dl)	4.8 ± 1.2	5.4 ± 1.3	4.4 ± 1.0	< 0.001
AST (IU/l)	24 (20-26)	25 (20-29)	21 (20-24)	0.039
ALT (IU/l)	18 (15-24)	22 (17-34)	17 (14-21)	< 0.001
γGTP (IU/l)	19 (15-30)	28 (19-46)	17 (14-24)	0.007
BNP (pg/ml)	16.4 (11.1-28.3)	13.8 (8.0-18.3)	20.3 (12.7-30.8)	0.699
hsCRP (mg/dl)	0.03 (0.02-0.07)	0.04 (0.02-0.15)	0.02 (0.01-0.05)	0.002
FABP4 (ng/ml)	11.6 (7.5-16.1)	9.1 (5.5-12.7)	13.5 (8.3-18.2)	0.009
FABP5 (ng/ml)	1.5 (1.2-2.1)	1.6 (1.2-2.1)	1.5 (1.0-2.0)	0.119
Cholesterol efflux capacity	0.8 ± 0.1	0.8 ± 0.1	0.9 ± 0.1	0.035
Carotid ultrasonographic data				
mean IMT (mm)	0.70 ± 0.14	0.72 ± 0.12	0.69 ± 0.14	0.182
mean Stiffness β	6.1 (4.5-8.3)	6.4 (4.6-8.4)	5.7 (4.5-8.3)	0.989

Variables are expressed as number, means ± SD or medians (interquartile ranges).

AST, Aspartate transaminase; ALT, Alanine transaminase; BNP, brain natriuretic peptide;

eGFR, estimated glomerular filtration rate; FABP4, fatty acid-binding protein 4; FABP5, fatty acid-binding protein 5;

γGTP, γ-glutamyl transpeptidase; hsCRP, high-sensitivity C-reactive protein; IMT, intima-media thickness.

Table S2

Table S2. Correlation analyses for CEC and log FABP5 (n = 129)

	CEC		log FABP5	
	r	P	r	P
Age	-0.164	0.063	0.157	0.076
Body mass index	-0.075	0.400	0.101	0.254
Waist circumference	-0.076	0.390	0.113	0.201
Systolic blood pressure	-0.142	0.108	-0.049	0.585
Diastolic blood pressure	-0.060	0.501	-0.125	0.158
Pulse rate	0.172	0.056	-0.055	0.547
Total cholesterol	0.263	0.003	0.129	0.144
LDL cholesterol	-0.083	0.350	-0.102	0.250
HDL cholesterol	0.555	< 0.001	-0.078	0.388
log Triglycerides	-0.311	< 0.001	0.012	0.893
log Fasting glucose	-0.100	0.259	0.173	0.050
log Insulin	-0.230	0.009	0.092	0.299
log HOMA-R	-0.232	0.008	0.117	0.186
HbA1c	-0.018	0.843	0.017	0.849
Blood urea nitrogen	-0.003	0.777	0.267	0.002
Creatinine	-0.160	0.071	0.330	0.001
eGFR	0.120	0.174	-0.293	0.001
Uric acid	-0.023	0.799	0.195	0.027
log AST	0.086	0.332	0.168	0.057
log ALT	0.028	0.753	0.069	0.439
log γ GTP	0.008	0.929	0.063	0.475
log BNP	-0.086	0.332	0.062	0.485
log hsCRP	-0.214	0.016	0.037	0.682
log FABP4	0.082	0.356	0.088	0.321
log FABP5	-0.180	0.041	-	-

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 BNP, brain natriuretic peptide; CEC, cholesterol efflux capacity;
 eGFR, estimated glomerular filtration rate;
 FABP4, fatty acid-binding protein 4; FABP5, fatty acid-binding protein 5;
 γ GTP, γ -glutamyl transpeptidase; hsCRP, high-sensitivity C-reactive protein.