Material suplementario

El ácido acetilsalicílico reduce la liberación de micropartículas eritrocitarias, monocitarias y de células del músculo liso vascular en pacientes diabéticos

Gemma Chiva-Blanch[a], Rosa Suades[a], Teresa Padro[a], Gemma Vilahur[a], Esther Peña[a], Juan Ybarra[b], Jose M. Pou[c] y Lina Badimon[a,*]

[a] *Institut Català de Ciències Cardiovasculars (ICCC), Barcelona, España*

[b] *Teknon Medical Center, Barcelona, España*

[c] *Servicio de Endocrinología, Hospital de la Santa Creu i de Sant Pau, Universitat Autònoma de Barcelona, Barcelona, España*

SUPPLEMENTARY MATERIAL

Table 1 of the supplementary material.

Baseline Characteristics of the 43 Diabetic Patients and the 38 Control Subjects Studied

	PATIENTS (n=43)	**CONTROLS (n=38)**	***P***
Age (years)	55±10	59±13	.133
Males [n (%)]	24 (55.8)	17 (44.7)	.217
Current smokers [n (%)]	9 (20.9)	7 (18.4)	.617
Diabetis Mellitus [n (%)]	43 (100)	0 (0)	<.0001
Dyslipidemia [n (%)]	40 (93.0)	34 (89.5)	.722
Hypertension [n (%)]	40 (90.7)	25 (65.8)	.064
Body Mass Index (kg/m^2)	25.70±3.04	26.89±3.29	.086
Body Mass Index >25 kg/m^2 [n (%)]	21 (48.8)	22 (57.9)	.485
Systolic Blood Pressure (mmHg)	138±14	145±22	.072
Diastolic Blood Pressure (mmHg)	81±8	82±10	.510
Statins [n (%)]	33 (76.7)	32 (84.2)	.806
Acetylsalicylic acid [n (%)]	43 (100)	0 (0)	<.0001

P value from one-way ANOVA for quantitative variables and from Chi-square analysis for qualitative variables.

Table 2 of the supplementary material.

Comparison of Circulating Microparticle Levels in the 38 Controls and the 43 Patients Before and After Acetylsalicylic Acid Intervention

	DIABETIC PATIENTS				
AV^+ MPs/µL PFP	**Before ASA**	**After ASA**	**CONTROLS**	***P*[1]**	***P*[2]**
Total	500.7 ± 141.2	479.1 ± 140.8	336.45 ± 169.04	<.001	<.001
Platelet-derived cMPs					
$CD61^+$	150.2 ± 86.3	140.9 ± 79.4	103.57 ± 68.08	.005	.028
$CD61^+/CD142^+$	31.4 ± 25.5	31.0 ± 27.3	15.26 ± 11.67	<.001	<.001
$PAC1^+$	12.2 ± 11.9	15.1 ± 13.1	6.8 ± 3.13	<.001	<.001
$CD62P^+$	32 ± 26.6	32.8 ± 26.7	19.07 ± 17.25	<.001	<.001
$PAC1^+/CD62^+$	6.6 ± 8.1	7.8 ± 8.7	4.5 ± 6.8	.002	.010
Endothelial-derived cMPs					
$CD146^+$	10.3 ± 7.3	11.5 ± 9.2	6.07 ± 7.42	<.001	<.001
$CD146^+/CD62E^+$	9.7 ± 7.5	10.1 ± 8.7	5.07 ± 5.42	<.001	<.001
$CD62E^+$	6.6 ± 8.1	7.8 ± 8.7	4.25 ± 3.79	<.001	<.001
Erythr*ocyte-derived cMPs*					
$CD235a^+$	78 ± 48.9	64.5 ± 28.3*	74.53 ± 60.29	.424	.594
Leukocyte-derived cMPs					
$CD45^+$	130.3 ± 97.5	118.5 ± 59.8	43.09 ± 30.39	<.001	<.001
$CD3^+/CD45^+$	28.3 ± 30.9	24.1 ± 15.7	12.61 ± 8.21	<.001	<.001

$CD14^+$	39.5 ± 29.8	30.7 ± 19.8*	4.73 ± 4.9	<.001	<.001
$CD11b^+/CD14^+$	25.6 ± 25	19.9 ± 15*	17.19 ± 16.7	<.001	<.001
$CD45^+/CD3^-/CD14^-$	64.5 ± 92.9	56.9 ± 44.3	33.67 ± 27.21	.043	.007
$CD11b^+$	70.3 ± 52.4	65.3 ± 37.2	68.57 ± 48.16	.081	.434
$CD142^+/CD14^+$	23.1 ± 20.6	16.3 ± 12.6*	9 ± 12.99	<.001	<.001
$CD142^+$	72.1 ± 53.6	73.1 ± 53.1	68.45 ± 40.49	.275	.240
Smooth muscle cell-derived cMPs					
SMA^+	6.5 ± 10.6	3.1 ± 4.6*	2.17 ± 2.85	.014	.270
$CD142^+/SMA\text{-}\alpha^+$	2.8 ± 4.6	1.3 ± 2.4*	0.99 ± 1.85	.025	.456

P values from the Student *t* test for unrelated samples between: P^1: controls and patients before the ASA intervention; and P^2: controls and patients after the ASA intervention. **P*<.05 from the comparison between before and after the intervention (Student's *t* test for paired samples) in diabetic patients.

Used markers were CD61 for platelets, CD146 for endothelial cells, CD235ab for erythrocytes, CD45 for total leukocytes, and CD3 for lymphocytes and CD14 for monocytes origins accounting for agranulocytes. Granulocytes were inferred subtracting agranulocytes subpopulation from leukocytes fraction and smooth muscle actin-α was used for smooth muscle cells. The other CDs were used as biomarkers of cell activation (see Table 1 from the manuscript).

AV, Annexin V; ASA, acetylsalicylic acid; CI, confidence interval, cMPs, circulating microparticles; PFP, platelet free plasma.