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SUPPLEMENTARY MATERIAL

Optimizing cardiovascular risk control after an acute coronary syndrome: the role of a structured follow-up program

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SUPPLEMENTARY CONTENT 1

Between group analysis

For the between group comparison at baseline and 12-months follow-up, all patients with available LDL-C, HBA1c and SBP data were considered.

There was no significant difference in the median LDL-C values at baseline between the two groups [RCC group: 98 (IQR: 76, 131) mg/dL vs. SCCC group: 100 (IQR: 74, 126) mg/dL, p=0.7], while their values at the end of the program [RCC group: 66 (IQR: 53, 84) mg/dL vs. SCCC group: 52 (IQR: 43, 66) mg/dL, p<0.001] were significantly different, with the SCCC group achieving lower LDL values (Supplemental Table 1).

No significant differences in median HbA1c at baseline were observed between the two groups [RCC group: 7.10% (IQR: 6.40, 8.30) vs. SCCC group: 6.90% (IQR: 6.30, 7.65), p=0.2]. However, a significant difference emerged at the end of the follow-up period [RCC group: 7.00% (IQR:6.30, 7.80) vs. SCCC group: 6.40% (IQR: 6.10, 6.85), p=0.007], with lower HbA1c values achieved in patients with type 2 DM submitted to the SCCC program (Supplemental Table 1). A significant difference was noted in the median SBP values between both groups at baseline, with higher SBP values observed in the SCCC group [RCC group: 130 (IQR: 115, 143) mmHg vs. SCCC group: 134 (IQR: 120, 145) mmHg, p=0.042]. However, at the end of the follow-up, no significant difference was detected between the study groups [RCC group: 130 (IQR: 120, 141) mmHg vs. SCCC group: 130 (IQR: 117, 140) mmHg, p=0.2] (Supplemental Table 1). There were no significant differences between groups regarding the change in smoking habits at the end of the follow-up period [SCCC group: 45 (65.2%) stopped smoking, 6 (8.7%) reduced smoking and 18 (26.1%) remained active smokers vs. RCC group: 55 (63.2%) stopped smoking, 2 (2.3%) reduced smoking and 30 (34.5%) remained active smokers. p=0.14]

Supplementary Table 1. LDL-C, SBP and HbA1c variation.

Cardiovascular Risk Factor	**RCC,** N = 284	**SCCC,** N = 237	**p-value**[(a)]
LDL-C baseline, mg/dL	98 (76, 131)	100 (74, 126)	0.7
LDL-C end of intervention, mg/dL	66 (53, 84)	52 (43, 66)	<0.001
SBP baseline, mmHg	130 (115, 143)	134 (120, 145)	0.042
SBP end of intervention, mmHg	130 (120, 141)	130 (117, 140)	0.2
Only patients with type 2 DM	**RCC,** N = 93	**SCCC,** N = 75	
HbA1c baseline, %	7.10 (6.40, 8.30)	6.90 (6.30, 7.65)	0.2
HbA1c end of intervention, %	7.00 (6.30, 7.80)	6.40 (6.10, 6.85)	0.007
[(a)]Wilcoxon rank sum test			
DM: Diabetes *mellitus;* HbA1c: Glycated hemoglobin; LDL-C: Low-density lipoprotein-cholesterol; RCC: Regular cardiology consultation; SBP: Systolic blood pressure; SCCC: Structured coronary-disease consultation.			

SUPPLEMENTARY CONTENT 2

Number of patients included in the paired analysis

Only patients with baseline and end of follow-up values were included in the intragroup statistical analysis. There were 216 (91.1%) patients in the SCCC group and 138 (48.6%) patients in the RCC group with LDL-C levels measured both at baseline and the end of the follow-up. Among the diabetic patients there were 60 (80.0%) patients in the SCCC group and 41 (44.1%) patients in the RCC with HbA1c levels measured at both time periods. Also, 217 (91.6%) patients in the SCCC group and 280 (98.6%) in the RCC group had SBP values available both at baseline and the end of the follow-up (Supplemental Table 2).

Supplementary Table 2. Number of missing values for LDL-C, SBP, and HbA1c

Cardiovascular Risk Factor	**RCC**, N = 284	**SCCC**, N = 237
LDL-C baseline	4 (1.41%)	4 (1.69%)
LDL-C end of Intervention	144 (50.7%)	19 (8.02%)
SBP baseline	0 (0.0%)	3 (1.27%)
SBP end of intervention	4 (1.41%)	18 (7.59%)
Only type 2 DM patients:	**RCC**, N = 93	**SCCC**, N = 75
HbA1c baseline	6 (6.45%)	4 (5.33%)
HbA1c end of intervention	50 (53.8%)	12 (5.06%)
DM: Diabetes *mellitus;* HbA1c: Glicated hemoglobin; LDL-C: Low-density lipoprotein-cholesterol; RCC: Regular cardiology consultation; SCCC: Structured coronary-disease consultation; SBP: Systolic blood pressure.		

SUPPLEMENTARY CONTENT 3

At the end of the follow-up period, 83.7% of patients in the RCC group and 23.2% of patients in the SCCC group were treated with high-intensity statin monotherapy, while the combination of a high-intensity statin and ezetimibe was prescribed to 10.6% of patients in the RCC group and 66.7% in the SCCC group (Supplemental Table 3.1).

Regarding antidiabetic therapy, in the RCC group 28% of patients were on metformin monotherapy, 20% were prescribed a combination of metformin and sodium–glucose cotransporter-2 (SGLT2) inhibitors, 10.8% received metformin plus dipeptidyl peptidase-4 (DPP-4) inhibitors, and 4.3% were treated with insulin alone. In the SCCC group, 32% of patients with type 2 DM were treated with a combination of metformin and SGLT2 inhibitors, 20% received triple therapy with metformin, DPP-4 inhibitors, and SGLT2 inhibitors, and 6.7% received metformin, insulin, and SGLT2 inhibitors. Notably, in this group, 8% were treated with metformin alone, and the proportion of patients on other monotherapies was low (2.7% on insulin alone, 1.3% on DPP-4 inhibitors alone, and 5.3% on SGLT2 inhibitors alone) (Supplemental Table 3.2).

With respect to antihypertensive therapy, 82% of patients in the RCC group were treated with an angiotensin-converting enzyme inhibitor (ACEI), an angiotensin II receptor antagonist (ARB), or an angiotensin receptor–neprilysin inhibitor (ARNI), a proportion that increased slightly to 82.8% in the SCCC group. Most patients received combination therapy: in the RCC group, 45.9% were treated with a combination of an ACEI/ARB and a beta-blocker (BB), and 17.3% received triple therapy with an ACEI/ARB, a BB, and a dihydropyridine calcium channel blocker (CCBdp). In the SCCC group, 40.5% of patients were treated with an ACEI/ARB plus a BB, 14.8% were on BB monotherapy, and 11.8% on ACEI/ARB monotherapy (Supplemental Table 3.3).

Supplementary Table 3.1 Antidyslipidemic therapy at the end of the follow-up period.

Antidyslipidemic drugs	**RCC,** N = 284	**SCCC,** N = 237
High-Intensity Statin	237 (83.7%)	55 (23.2%)
High-Intensity Statin + Ezetimibe	30 (10.6%)	158 (66.7%)
Low-Intensity Statin	10 (3.5%)	3 (1.3%)
Low-Intensity Statin + Ezetimibe	-	6 (2.5%)
Ezetimibe	-	7 (3.0%)
None	7 (2.5%)	8 (3.4%)

Supplementary Table 3.2. Antidiabetic therapy at the end of the follow-up period.

Antidiabetic therapy	**RCC,** N = 93	**SCCC,** N = 75
Metformin + Insulin + SGLT2i + GLP1a	1 (1.1%)	-
Metformin + GLP1a + SGLT2i	-	5 (6.7%)
Metformin + Insulin + SGLT2i + DDP4i	2 (2.2%)	3 (4.0%)
Metformin + Insulin + DDP4i	4 (4.3%)	-
Metformin + Insulin + SGLT2i	2 (2.2%)	5 (6.7%)
Metformin + Insulin	1 (1.1%)	2 (2.7%)
Metformin + DDP4i + SGLT2i	3 (3.2%)	15 (20.0%)
Metformin + DDP4i	18 (19.4%)	1 (1.3%)
Metformin + SGLT2i	10 (10.8%)	24 (32.0%)
Metformin	26 (28%)	6 (8.0%)
Insulin + GLP1a	1 (1.1%)	-
Insulin + DPP4i + SGLT2i	1 (1.1%)	1 (1.3%)
Insulin + DPP4i	2 (2.2%)	1 (1.3%)
Insulin + SGLT2i	3 (3.2%)	1 (1.3%)
Insulin	4 (4.3%)	2 (2.7%)
GLP1a + SGLT2i	-	3 (4.0%)
DPP4i + SGLT2i	2 (2.2%)	1 (1.3%)
DPP4i	9 (9.7%)	1 (1.3%)
SGLT2i	2 (2.2%)	4 (5.3%)
None	2 (2.2%)	1 (1.3%)

DPP4i: Dipeptidyl Peptidase-4 Inhibitor; GLP1a: Glucagon-Like Peptide-1 Receptor Agonist; Insulin: Insulin; Metformin: Metformin; SGLT2i: Sodium–Glucose Cotransporter-2 Inhibitor.

Supplementary Table 3.3. Antihypertensive therapy at the end of the follow-up period.

Antihypertensive drugs	**RCC,** N = 284	**SCCC,** N = 237
BB + ARNI + CCBdp + MRA	-	1 (0.5%)
BB + ARNI + MRA	2 (0.7%)	14 (5.9%)
BB + ACEi/ARB + CCBdp + MRA	3 (1.1%)	3 (1.3%)
BB + ACEi/ARB + CCBdp	49 (17.3%)	20 (8.4%)
BB + ACEi/ARB + MRA	19 (6.7%)	13 (5.5%)
BB + ACEi/ARB	130 (45.9%)	96 (40.5%)
BB + CCBdp	15 (5.3%)	5 (2.1%)
BB + MRA	1 (0.4%)	6 (2.5%)
BB + ARNI	3 (1.1%)	1 (0.4%)
BB	18 (6.4%)	35 (14.8%)
ARNI + MRA	-	1 (0.4%)
ACEi/ARB + CCBdp + MRA	1 (0.4%)	1 (0.4%)
ACEi/ARB + CCBdp	6 (2.1%)	8 (3.4%)
ACEi/ARB + MRA	2 (0.7%)	1 (0.4%)
ACEi/ARB	17 (6%)	28 (11.8%)
CCBdp	6 (2.1%)	-
MRA	1 (0.4%)	-
None	11 (3.9%)	4 (1.7%)

ACEi/ARB: Angiotensin-Converting Enzyme Inhibitor / Angiotensin II Receptor Blocker; ARNI: Angiotensin Receptor–Neprilysin Inhibitor; BB: Beta-Blocker; CCBdp: Dihydropyridine Calcium Channel Blocker; MRA: Mineralocorticoid Receptor Antagonist.

SUPPLEMENTARY CONTENT 4
Supplementary Table 4. Self-reported smoking status variation.

Program	Active smokers at baseline (N)	Smoking status at the end of the program	N (%)
RCC	87	Active smoker	30 (34.5%)
		Reduce smoking	2 (2.3%)
		Stop smoking	55 (63.2%)
SCCC	69	Active smoker	18 (26.1%)
		Reduce smoking	6 (8.7%)
		Stop smoking	45 (65.2%)

RCC: Regular cardiology consultation; SCCC: Structured coronary-disease consultation.