

Table S1 Characteristics of patients included in and excluded from the present study

Variable	Total (n=649)	Patients included (n=455)	Patients excluded (n=194)	P value
Age, year	46.2±14.3	45.8±14.7	47.0±13.2	0.290
Female, n (%)	249 (38.4)	173 (38.0)	76 (39.2)	0.792
BMI, kg/m ²	25.3±4.0	25.3±4.1	25.5±3.8	0.692
BSA (m ²)	1.76±0.20	1.75±0.20	1.77±0.20	0.365
Hypertension, n (%)	183 (28.2)	128 (28.1)	55 (28.4)	1.000
Diabetes mellitus, n (%)	27 (4.2)	19 (4.2)	8 (4.1)	1.000
Hyperlipidemia, n (%)	173 (26.7)	131 (28.8)	42 (21.6)	0.066
History of atrial fibrillation, n (%)	77 (11.9)	50 (11.0)	27 (13.9)	0.291
Ambulatory ECG findings*, n (%)				
Ventricular tachycardia	1 (0.2)	1 (0.3)	0 (0.0)	1.000
Non-sustained ventricular tachycardia	96 (17.9)	70 (17.7)	26 (18.3)	0.899
Presence of OCA stenosis, n (%)				0.515
Normal	614 (94.6)	432 (94.9)	182 (93.8)	
<70% stenosis	11 (1.7)	6 (1.3)	5 (2.6)	
≥70% stenosis	24 (3.7)	17 (3.7)	7 (3.6)	
Family history of HCM, n (%)	64 (9.9)	45 (9.9)	19 (9.8)	1.000
Family history of SCD, n (%)	33 (5.1)	22 (4.8)	11 (5.7)	0.697
Smoking history, n (%)	244 (37.6)	176 (38.7)	68 (35.1)	0.426
Clinical presentation, n (%)				
Dyspnea	558 (86.0)	386 (84.8)	172 (88.7)	0.218
Chest pain	222 (34.2)	155 (34.1)	67 (34.5)	0.928
Presyncope	157 (24.2)	118 (25.9)	39 (20.1)	0.133
Syncope	153 (23.6)	109 (24.0)	44 (22.7)	0.763
Palpitation	167 (25.7)	117 (25.7)	50 (25.8)	1.000
Mean NYHA function class	2.6±0.5	2.6±0.5	2.6±0.5	0.351
Echocardiographic indices				
Left atrial diameter, mm	45.7±6.9	45.4±6.9	46.3±6.8	0.120
LVEDD, mm	42.5±5.3	42.1±5.2	43.4±5.4	0.004
LVEF, %	70.4±5.3	70.6±5.1	70.0±5.9	0.141
Interventricular septum, mm	19.0±4.5	19.3±4.5	18.4±4.6	0.020
Posterior LV wall, mm	11.9±2.7	12.0±2.8	11.7±2.6	0.244
Maximal LV wall, mm	21.6±4.5	21.8±4.4	21.3±4.7	0.224
SAM, %	607 (93.5)	423 (93.0)	184 (94.8)	0.486
LV outflow gradient, mm Hg	79.6±28.0	78.1±27.8	83.2±28.4	0.034

*, 537 patients had ambulatory ECG. BMI, body mass index; BSA, body surface area; ECG, electrocardiogram; HCM, hypertrophic cardiomyopathy; LV, left ventricular; LVEDD, left ventricular end-diastolic diameter; LVEF, left ventricular ejection fraction; NYHA, New York Heart Association; OCA, obstructive coronary artery; SAM, systolic anterior motion of mitral valve; SCD, sudden cardiac death.

Table S2 Comparison of characteristics among patients with and without intramural coronary artery in the matched cohort

Variable	Patients with ICA (n=106)	Patients without ICA (n=106)	P value
Age, year	41.2±14.8	42.8±14.7	0.438
Female, n (%)	34 (32.1)	41 (38.7)	0.389
BMI, kg/m ²	24.6±3.5	25.1±3.5	0.347
BSA (m ²)	1.76±0.21	1.75±0.21	0.796
Hypertension, n (%)	19 (17.9)	21 (19.8)	0.861
Diabetes mellitus, n (%)	2 (1.9)	4 (3.8)	0.683
Hyperlipidemia, n (%)	28 (26.4)	29 (27.4)	1.000
History of atrial fibrillation, n (%)	9 (8.5)	5 (4.7)	0.408
Ambulatory ECG findings [†] , n (%)			
Ventricular tachycardia	1 (1.0)	0 (0.0)	1.000
Non-sustained ventricular tachycardia	14 (14.3)	19 (21.8)	0.248
Presence of OCA stenosis, n (%)			1.000
Normal	102 (96.2)	103 (97.2)	
<70% stenosis	1 (0.9)	1 (0.9)	
≥70% stenosis	3 (2.8)	2 (1.9)	
Family history of HCM, n (%)	17 (16.0)	11 (10.4)	0.310
Family history of SCD, n (%)	4 (3.8)	8 (7.5)	0.374
Smoking history, n (%)	37 (34.9)	37 (34.9)	1.000
Clinical presentation, n (%)			
Dyspnea	84 (79.2)	90 (84.9)	0.371
Chest pain	39 (36.8)	37 (34.9)	0.886
Presyncope	27 (25.5)	26 (24.5)	1.000
Syncope	28 (26.4)	23 (21.7)	0.521
Palpitation	36 (34.0)	17 (16.0)	0.004
Mean NYHA function class	2.5±0.6	2.6±0.5	0.573
Echocardiographic indices			
Left atrial diameter, mm	45.5±7.7	44.5±7.0	0.357
LVEDD, mm	41.3±6.4	41.8±5.0	0.536
LVEF, %	71.3±5.1	69.7±5.5	0.032
Interventricular septum, mm	20.2±4.9	19.6±3.9	0.265
Posterior LV wall, mm	11.7±2.9	12.2±2.9	0.275
Maximal LV wall, mm	22.4±4.9	22.0±4.4	0.528
SAM, %	100 (94.3)	94 (88.7)	0.217
LV outflow gradient, mm Hg	78.8±28.2	75.5±29.0	0.412

[†], 185 patients had ambulatory ECG. BMI, body mass index; BSA, body surface area; ECG, electrocardiogram; HCM, hypertrophic cardiomyopathy; LV, left ventricular; LVEDD, left ventricular end-diastolic diameter; LVEF, left ventricular ejection fraction; NYHA, New York Heart Association; OCA, obstructive coronary artery; SAM, systolic anterior motion of mitral valve; SCD, sudden cardiac death.