

TABLES AND FIGURES

Table 1: Baseline demographics (n=90)				
Variable	All (N=90)	VT recurrence (N=37)	No Recurrence (N=53)	P value
Age (mean, SD)	67.3 (9.7)	68 (8.6)	66.8 (10.5)	0.5
Male (n,%)	88 (98)	37 (100)	51 (96)	0.51
NYHA class				0.95
I (n, %)	26 (29)	10 (38.5)	16 (61.5)	
II (n, %)	32 (36.7)	14 (33.3)	18 (56.7)	
III (n, %)	17 (20)	7 (41.2)	10(58.8)	
Unkown (n, %)	15 (14.3)	6 (40)	9 (60)	
Ejection fraction (mean, SD)	30.7 (10)	27.8 (7.6)	32.6 (11)	0.024
VT Cycle length				0.52
>350 ms (n, %)	53 (59)	20 (37.7)	33 (62.3)	
<=350 ms (n, %)	37 (41)	17 (46)	20 (54)	
Scar characteristics				
Scar area in cm2 (mean, SD)	65 (34.5)	76 (36.3)	57 (31)	0.012
None-scar area in cm2 (mean, SD)	147.3 (46)	142 (48.8)	151 (44)	0.34
Proportion (%) of scar area to total LV area (mean, SD)	30.3 (12.4)	35 (12)	27 (11.6)	0.008
VT storm in preceding 12 mo (n, %)	40 (44.4)	20 (54)	20 (38)	0.14
AAD post ablation (n, %)	46 (51)	27 (74)	19 (36)	<0.001
Device therapies				
Change in Shock burden (median, IQR)	2(1.0-6.0) to 0 (0.0-1.0)	4 (2.0-8.0) to 1 (0.0-3.75)	1 (0.0-3.50) to 0(0.0-0.0)	<0.001
Change in ATP Burden (median, IQR)	8 (2.25-21.3) to 0 (0.0-5.0)	12 (3.0-23.0) to 7 (1.5-40.0)	6 (2.0-18.8) to 0(0.0-0.0)	0.001

Table 1. SD = standard deviation; NYHA = New York Heart Association; VT = ventricular tachycardia; LV = left ventricle; AAD = anti-arrhythmic drug; IQR = interquartile range; ATP = anti-tachycardia pacing

Variable	Univariate	P value	Multivariate	P value
VT cycle length >350 ms vs ≤350 ms	1.40 (0.60,3.30)	0.437		
VT storm in 12 months before CA	1.94 (0.83,4.55)	0.127		
No. of intraprocedural VTs	1.17 (0.93, 1.47)	0.035		
Scar area ≥42.5 cm ²	4.31 (1.27,14.57)	0.019		
Scar burden ≥28.5%	3.41 (1.27,9.11)	0.015	2.82 (1.02 - 7.79)	0.045
LVEF %	0.76 (0.59,0.97)	0.029	0.95 (0.89 - 1.01)	0.11

Table 2. Univariable and Multivariable logistic regression for predictors of ventricular tachycardia recurrence within 12 months following catheter ablation

Table 3. Variables entered into multivariable analysis were scar proportion, scar area, and LVEF; however, because of collinearity between scar area and scar proportion, only scar proportion was retained as the scar metric in the final adjusted model. OR = odds ratio; CI = confidence interval; LV = left ventricle; LVEF = left ventricle ejection fraction, VT = ventricular tachycardia; CA = catheter ablation;

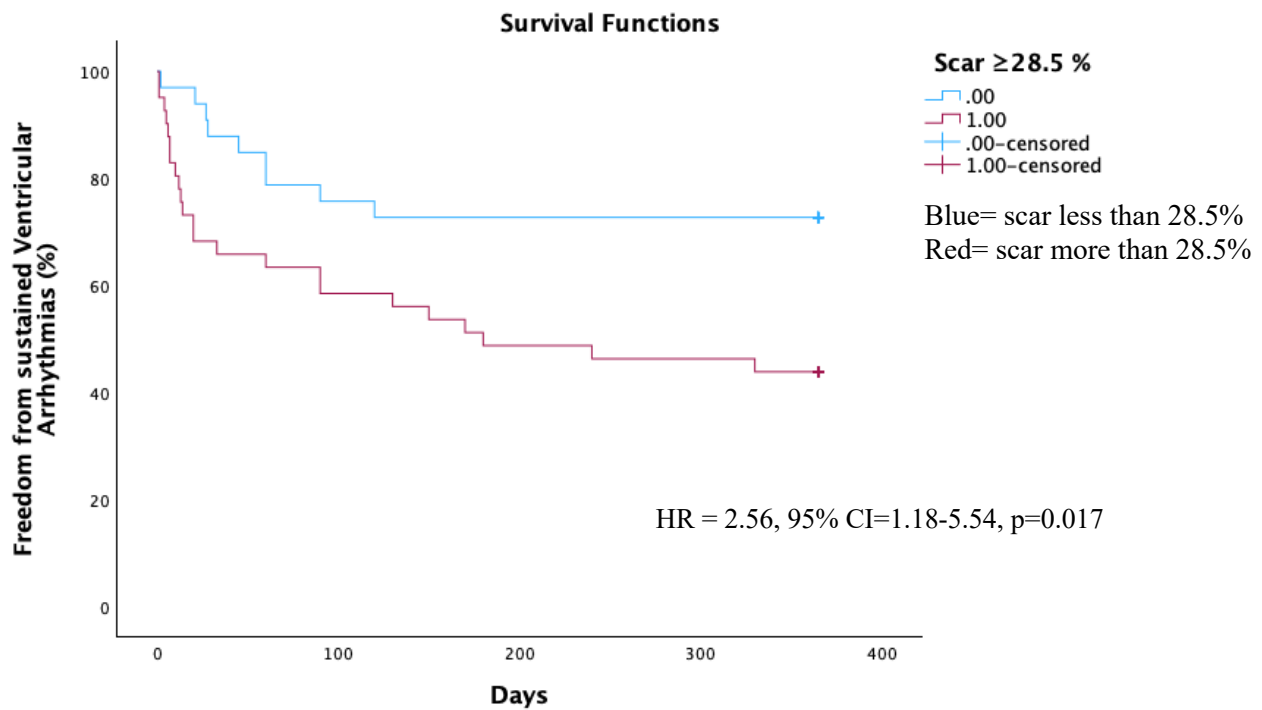


Figure 1. KM curve based on Scar proportion of 28.5%

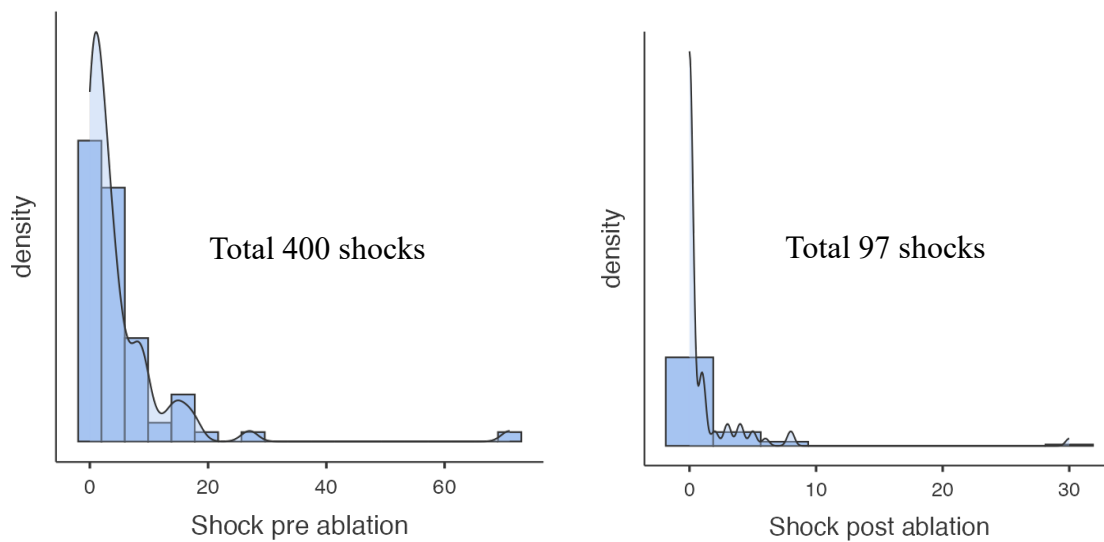


Figure 2. Density histogram of ICD shock burden in the year preceding ablation compared with the first year following ablation among patients with paired device interrogation data (n = 78). VT ablation was associated with a significant reduction in shock burden.

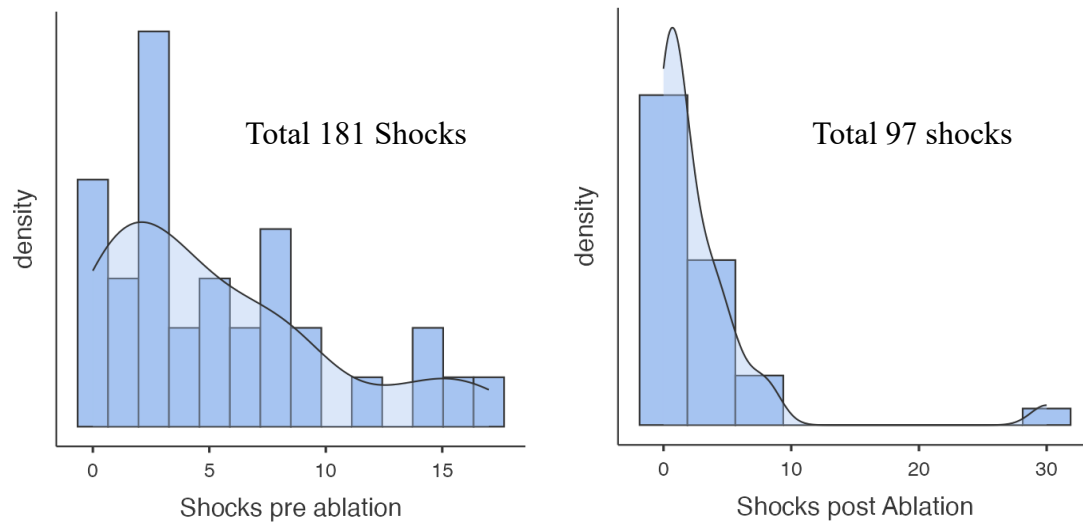
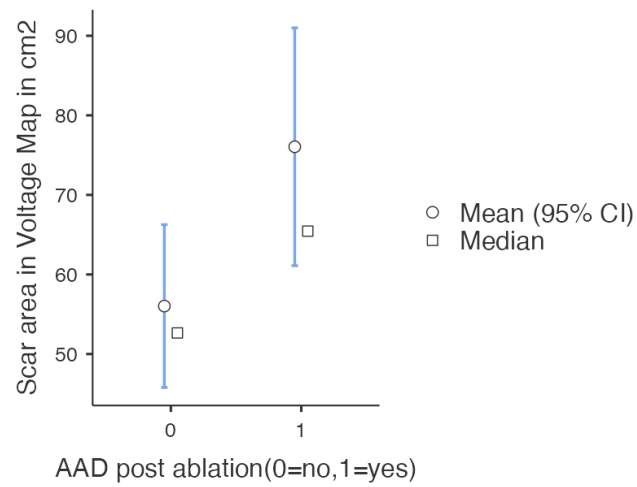


Figure 3. Density histogram of ICD shock burden before and after ventricular tachycardia ablation among patients with recurrent VT. Despite recurrence, most patients experienced a reduction in ICD shock burden following ablation

Scar area in Voltage Map in cm2



LVEF %

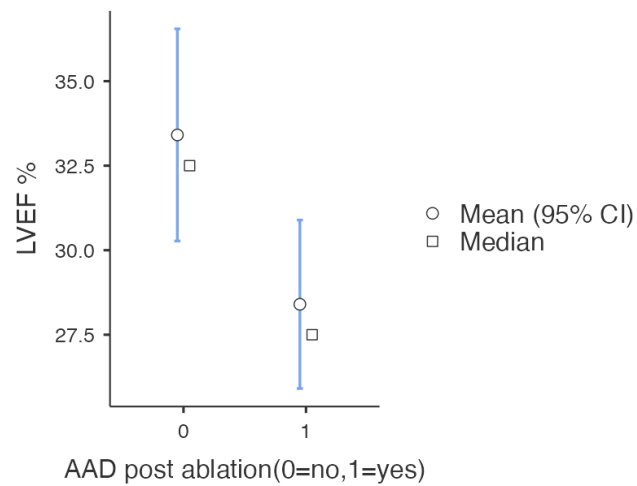


Figure 4. Descriptive plot comparing LVEF and Scar area between those treated with AAD, and those not on AAD post ablation. They show larger scar area in cm2 and lower LVEF% in the AAD treated patients. AAD=Antiarrhythmic drug