

SUPPLEMENTAL MATERIAL

Table I. Demographic, Clinical, and Operative Characteristics by presence of watershed and embolic infarct on diffusion weighted MRI

Clinical characteristics and demographics:	Overall (n=129)	Embolic infarct (n= 77)	No embolic infarct (n=52)	<i>P</i> value	OR (95% CI)	Watershed infarct (n= 19)	No watershed infarct (n=110)	<i>P</i> value	OR (95% CI)
Age (years)	75 (70-80)	75 (70-79)	76 (70-80)	0.84	1.0 (0.9-1.1)	77 (70-81)	75 (70-80)	0.42	1.0 (0.9-1.2)
Female	43 (33.6)	27 (35.1)	16 (31.4)	0.67	1.2 (0.6-2.5)	6 (31.6)	37 (34)	0.84	0.9 (0.1-2.6)
Non-white	9 (7.0)	4 (5.2)	5 (9.6)	0.33	1.3 (0.7-2.8)	2 (10.5)	7 (6.4)	0.51	0.7 (0.3-1.7)
Body mass index	29 (26-32)	29 (27-33)	28 (26-33)	0.14	1.0 (0.9-1.1)	29 (26-32)	29 (26-33)	0.66	0.9 (0.9-1.1)
Current smoker	4 (3.1)	1 (1.3)	3 (5.8)	0.15	0.2 (0.02-2.0)	1 (5.3)	3 (2.7)	0.56	2.0 (0.2-20)
COPD	11 (8.5)	5 (6.5)	6 (11.5)	0.31	0.5 (0.2-1.9)	0	11 (10)	0.15	
Hypertension	110 (85.3)	65 (84.4)	45 (86.5)	0.74	0.8 (0.3-2.3)	17 (89.5)	93 (84.6)	0.58	1.6 (0.3-7.3)
Diabetes	42 (32.6)	26 (33.8)	16 (30.8)	0.72	1.2 (0.5-2.4)	7 (36.8)	35 (31.8)	0.67	1.3 (0.5-3.4)
Hyperlipidemia	113 (87.6)	66 (85.7)	47 (90.4)	0.43	0.64 (0.2-2.0)	18 (94.7)	95 (86.4)	0.31	2.8 (0.4-22)
Peripheral vascular disease	11 (8.5)	7 (9.1)	4 (7.7)	0.78	1.2 (0.3-4.3)	1 (5.3)	10 (9.1)	0.58	0.6 (0.1-4.6)
Chronic Renal Failure	5 (3.9)	3 (3.9)	2 (3.9)	0.99	1.0 (0.2-6.2)	0	5 (4.6)	0.99	
Atrial fibrillation	43 (33.3)	21 (27.3)	22 (42.3)	0.08	0.5 (0.2-1.1)	7 (36.8)	36 (32.7)	0.73	1.2 (0.4-3.3)
Prior stroke or TIA	12 (9.3)	7 (9.1)	5 (9.6)	0.92	0.9 (0.3-3.1)	1 (5.26)	11 (10)	0.51	0.5 (0.6-4.1)
Coronary artery disease	83 (64)	48(62)	35(67)	0.6	0.8 (0.4-1.7)	11(58)	72 (65)	0.5	0.7 (0.3-2.0)

Prior PTCA or CABG	27 (21)	12 (15.6)	15 (28.9)	0.07	0.5 (0.2-1.1)	2 (11)	25 (23)	0.36	0.4 (0.9-1.9)
Congestive heart failure	31 (24.0)	15 (19.5)	16 (30.8)	0.14	0.5 (0.2-1.2)	5 (26.3)	26 (23.6)	0.8	1.2 (0.4-3.5)
Left ventricular ejection fraction	60 (55-65)	60 (55-65)	60 (54-64)	0.19	1.0 (0.9-1.1)	65 (60-69)	60 (55-65)	0.02	1.1 (1.0-1.1)
Mean aortic valve gradient (n=188)	44 (36-54)	47 (42-56)	40 (30-53)	0.005	1.0 (1.0-1.1)	49 (44-54)	44 (34-54)	0.12	1.0 (0.9-1.1)
Internal carotid artery stenosis >70%*	6/98 (6.1)	5/98 (8.2)	1/98 (2.7)	0.27	3.2 (0.4-28.6)	3/98 (21.4)	3/98 (3.6)	0.01	7.3 (1.3-41)
Old infarct subcortical	113 (88.3)	73 (94.8)	40 (78.4)	0.01	5.0 (1.5-16)	17 (89.5)	96 (88.1)	0.86	1.2 (0.2-5.6)
Old infarct cortical	12 (9.4)	10 (13)	2 (3.9)	0.12	3.7 (0.8-17)	1 (5.3)	11 (10.1)	0.51	0.5 (0.6-4.1)
Operative characteristics:									
Mod-Severe proximal ascending aortic atherosclerosis†	30/102 (29.4)	20/102 (32.8)	10/102 (24.4)	0.36	1.5 (0.6-3.7)	4/102 (26.7)	26/102 (29.9)	0.8	0.9 (0.2-2.9)
Mod-Severe middle ascending aortic atherosclerosis†	22/102 (21.6)	18/102 (28.6)	4/102 (10.3)	0.03	3.5 (1.1-11.3)	2/102 (13.3)	20/102 (23)	0.4	0.5 (0.1-2.5)
Mod-Severe distal ascending aortic atherosclerosis†	19/96 (19.8)	13/96 (22)	6 (16.2)	0.49	1.5 (0.5-4.3)	3/96 (20)	16/96 (19.8)	0.98	1.0 (0.3-4.0)
CPB time (minutes)	103 (83-136)	101 (80-138)	106 (87-131)	0.4	1.0 (0.99-1.0)	95 (74-144)	104 (84-136)	0.48	0.9 (0.9-1.0)
Concomitant MVR	12 (9.3)	5 (6.5)	7 (13.5)	0.18	0.4 (0.1-1.5)	1 (5.3)	11 (10)	0.51	0.5 (0.6-4.1)
Concomitant CABG	36 (27.9)	22 (28.6)	14 (27)	0.84	1.0 (0.5-2.4)	4 (21.1)	32 (29.1)	0.47	0.7 (0.2-2.1)
Lowest hemoglobin	8.1 (7.3-8.8)	8.2 (7.1-8.8)	8 (7.5-8.7)	0.43	0.9 (0.7-1.2)	8.1 (7-8.8)	8.2 (7.4-8.8)	0.42	0.8 (0.6-1.2)

MAP drop‡	37 (30-48)	37 (28-48)	37 (31-49)	0.84	1.0 (0.9-1.0)	34 (28-43)	38 (31-49)	0.36	0.9 (0.9-1.0)
Post-operative atrial fibrillation	85 (66.4)	48 (62.3)	37 (72.6)	0.23	0.6 (0.3-1.4)	15 (79)	70 (64.2)	0.2	2.1 (0.6-6.7)

All continuous variables reported as median (interquartile range) or n (%). COPD indicates chronic obstructive pulmonary disease; PTCA, percutaneous transluminal coronary angioplasty; CABG, coronary artery bypass graft; CPB, cardiopulmonary bypass; MVR, mitral valve replacement; MAP, mean arterial pressure.

All patient clinical history was defined by patient report or prior chart documentation

*Doppler ultrasound

†Intraoperative epiaortic ultrasound (moderate atherosclerosis = 3-5mm calcification, and severe atherosclerosis = >5mm calcification)

‡Baseline MAP to lowest recorded MAP during procedure