

Endovascular Intervention for Basilar Artery Occlusion in the Elderly

SUPPLEMENTAL MATERIAL

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Table I. Baseline Characteristics of Patients with Intervention

Characteristics	All patients (n=647)	Age <75 (n=520)	Age ≥75 (n=127)	P Value
Age, median (IQR), years	64 (56-73)	62 (54-67)	78 (76-81)	<0.001
Sex, male, No. (%)	483 (74.7)	404 (77.7)	79 (62.2)	<0.001
NIHSS baseline score, median (IQR)	27 (17-33)	26 (16-33)	28 (17-34)	0.054
pc-ASPECTS baseline, median (IQR)	8 (7-9)	8 (7-9)	8 (7-9)	0.634
PC-CS score, median (IQR)	4 (3-6)	5 (3-6)	4 (4-6)	0.924
SBP, median (IQR), mm Hg	150 (134-166)	149 (133-166)	151 (138-171)	0.218
DBP, median (IQR), mm Hg	85 (77-97)	85 (78-98)	83 (75-94)	0.090
Medical history, No. (%)				
Hypertension	451 (69.7)	349 (67.1)	102(80.3)	0.004
Hyperlipidemia	214 (33.1)	193 (37.1)	21 (16.5)	<0.001
Diabetes mellitus	149 (23.0)	125 (24.0)	24 (18.9)	0.217
Atrial fibrillation	136 (21.0)	80 (15.4)	56 (44.1)	<0.001
Cerebral infarction	140 (21.6)	108 (20.8)	32 (25.2)	0.277
Intracerebral hemorrhage	12 (1.9)	9 (1.7)	3 (2.4)	0.916
Coronary artery disease	105 (16.2)	75 (14.4)	30 (23.6)	0.012
Heart failure	22 (3.4)	13 (2.5)	9 (7.1)	0.022
Chronicbronchitis	13 (2.0)	11 (2.1)	2 (1.6)	0.971
current or ex-smoker	235 (36.3)	207/502 (39.8)	28 (22.0)	<0.001
Cause of stroke, No. (%)				
Large artery atherosclerosis	418 (64.6)	362 (69.6)	56 (44.1)	<0.001
Cardioembolism	173 (26.7)	108 (20.8)	65 (51.2)	
Other causes	56 (8.7)	50 (9.6)	6 (4.7)	
Occlusion sites, No. (%)				
Distal basilar artery	222 (34.3)	157 (30.2)	65 (51.2)	<0.001
Middle basilar artery	195 (30.1)	161 (31.0)	34 (26.8)	
Proximal basilar artery	107 (16.5)	94 (18.1)	13 (10.2)	
Vertebral artery-V4	123 (19.0)	108 (20.8)	15 (11.8)	
Procedural factors				
intravenous thrombolysis, No. (%)	119 (18.4)	97 (18.7)	22 (17.3)	0.729
OTT, median (IQR), min	246 (132-390)	245 (127-401)	261 (151-365)	0.591
OTP, median (IQR), min	328 (220-493)	330 (217-501)	315 (241-475)	0.703
OTR, median (IQR), min	441 (328-627)	442 (329-645)	429 (310-587)	0.317
PTR, median(IQR), min	105 (71-151)	107 (74-153)	99 (64-135)	0.067
DTP, median(IQR), min	131 (88-200)	132 (88-199)	127 (85-205)	0.401
DTR, median (IQR), min	247 (186-345)	250 (191-346)	237 (166-315)	0.063
General anesthesia, No. (%)	257/639 (40.2)	220/516 (42.6)	37/123 (30.1)	0.011
Successful recanalization, No. (%)	522 (80.7)	418 (80.4)	104 (81.9)	0.700

OTT indicates Onset-treatment time; IQR: interquartile rage; NIHSS: National Institutes of Health Stroke Scale; pc-ASPECTS: posterior circulation-Alberta Stroke Program Early Computed Tomography Score; PC-CS score: posterior circulation collateral system score; SBP: Systolic blood pressure; DBP: Diastolic blood pressure; BAO: basilar artery occlusion; VA: vertebral artery;

OTP: onset-puncture time; OTR: Onset-recanalization time; PTR: puncture-recanalization time; DTP: door to puncture; DTR: door to recanalization

Figure I. Predicted probability of outcome with age and NIHSS in elderly patients with intervention

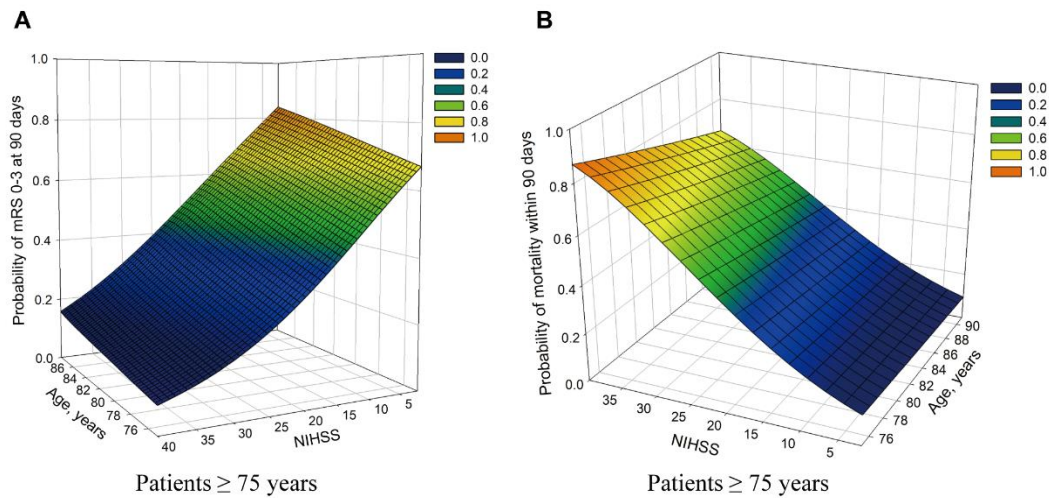


Figure I. Association of age and initial NIHSS with the probability of favorable functional outcome at 90 days (Panel A) and with the probability of mortality within 90 days (Panel B) in elderly patients with intervention. Both favorable functional outcome and mortality probability reduces with the initial NIHSS score while the outcome probability are stable over the age.