

SUPPLEMENTAL MATERIAL

Methodological factors in determining risk of dementia and cognitive impairment in TIA and stroke: (III) Applicability of short cognitive tests

Sarah T Pendlebury FRCP DPhil, Stephen P Klaus BMBCh, Ross Thomson BMBCh, Ziyah Mehta DPhil, Rose Wharton MSc, Peter M Rothwell FMedSci for the Oxford Vascular Study

Stroke Prevention Research Unit, Nuffield Department of Clinical Neurosciences, John Radcliffe Hospital, and the University of Oxford

Email: sarah.pendlebury@ndcn.ox.ac.uk

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Supplemental Table I. Assessed, testable vs untestable and numbers with a problem with cognitive testing at baseline.

	Total assessed	Untestable	Testable	p unadjusted/ adjusted	Tested but problem	Tested no problem	p unadjusted/ adjusted
	n=1097	n=262	n=835		n=71	n=764	
Mean/sd age at event	74.8/12.1	77.9/11.8	73.9/12.0	<0.001	78.7/11.1	73.4/12.0	0.0004
Male sex	521 (47)	110 (42)	411 (49)	0.041/0.17	35 (49)	376 (49)	0.99/0.68
Education (<12 years)	659 (60)	130 (50)	529 (63)	<0.001/<0.001	50 (70)	479 (63)	0.2/0.24
TIA (vs. stroke)	378 (34)	47 (18)	331 (40)	<0.001/<0.001	13 (18)	318 (42)	<0.001/<0.001
TIA	378 (34)	47 (18)	331 (40)	<0.001/<0.001	13 (18)	318 (42)	0.001/<0.001
Ischaemic stroke	679 (62)	197 (75)	482 (58)		56 (79)	425 (56)	
PICH	40 (4)	18 (7)	22 (3)		2 (3)	20 (2)	
TIA	378 (35)	51 (20)	327 (40)	<0.001/<0.001	13 (18)	318 (42)	<0.001/<0.001
Minor Stroke	429 (39)	58 (22)	371 (44)		26 (37)	345 (45)	
Major stroke	290 (26)	157 (60)	133 (16)		32 (45)	101 (13)	
Prior TIA	178 (16)	44 (17)	134 (16)	0.78/0.99	9 (13)	125 (16)	0.42/0.28
Prior stroke	180 (16)	49 (19)	131 (16)	0.25/0.53	15 (21)	116 (15)	0.19/0.38
Rankin ≥ 3	192/1061 (18)	71 (30)	121 (15)	<0.001/<0.001	20 (28)	101 (13)	0.001/0.016
Barthel < 20	273/1051 (26)	84 (37)	189 (23)	<0.001/0.002	29 (41)	160 (21)	<0.001/0.004
Leukoaraiosis							
None	526/963 (55)	92 (41)	434 (59)	<0.001/0.005	30 (46)	404 (60)	0.1/0.35
Mild	239 (25)	63 (28)	176 (24)		20 (31)	156 (23)	
Moderate/Severe	198 (21)	68 (31)	130 (17)		15 (23)	115 (17)	
Pre-stroke dementia	69 (6)	34 (13)	35 (4)	<0.001/<0.001	12 (17)	23 (3)	<0.001/0.008
Post-stroke dementia	260 (25)	81 (36)	179 (22)	<0.001/0.002	26 (44)	153 (21)	<0.001/0.12

Supplemental Table II. Assessed, testable vs untestable and numbers with a problem with cognitive testing at 1 month follow-up

	Total assessed	Untestable	Testable	p unadjusted/ adjusted	Tested but problem	Tested no problem	p unadjusted/ adjusted
	n=947	n=169	n=778		n=73	n=705	
Mean/sd age at event	73.8/11.8	76.7/11.6	73.8/11.8	0.003	80.8/9.4	73.0/11.8	<0.001
Male sex	452 (48)	75 (44)	377 (48)	0.34/0.6	26 (36)	351 (50)	0.021/0.11
Education (<12 years)	597 (63)	98 (58)	499 (64)	0.13/0.87	55 (75)	444 (63)	0.036/0.082
TIA (vs. stroke)	347 (37)	47(28)	300 (39)	0.009/0.016	14 (19)	286 (41)	<0.001/0.001
TIA	347 (37)	47(28)	300 (39)	0.032/0.082	14 (19)	286 (41)	0.001/0.0027
Ischaemic stroke	571 (60)	116 (69)	455 (58)		57 (78)	398 (56)	
PICH	29 (3)	6 (4)	23 (3)		2 (3)	21 (3)	
TIA	347 (37)	47(28)	300 (39)	<0.001/<0.001	14 (19)	286 (41)	<0.001/<0.001
Minor Stroke	396 (42)	62 (37)	334 (43)		25 (34)	309 (44)	
Major stroke	204 (22)	60 (36)	144 (19)		34 (47)	110 (16)	
Prior TIA	155 (16)	24 (14)	131 (17)	0.4/0.29	12 (16)	119 (17)	0.92/0.59
Prior stroke	155 (16)	39 (23)	116 (15)	0.009/0.021	18 (25)	98 (14)	0.014/0.048
Rankin ≥ 3	151/932 (16)	53 (33)	98 (13)	<0.001/<0.001	22 (31)	76 (11)	<0.001/<0.001
Barthel < 20	215/927 (23)	57 (36)	158 (21)	<0.001/<0.001	28 (39)	130 (19)	<0.001/0.004
Leukoaraiosis							
None	476/847 (56)	68 (48)	408 (58)	0.054/0.47	28 (40)	380 (60)	0.005/0.59
Mild	204 (24)	37 (26)	167 (24)		26 (38)	141 (22)	
Moderate/Severe	167 (20)	37 (26)	130 (18)		15 (22)	115 (18)	
Pre-stroke dementia	48 (5)	26 (15)	22 (3)	<0.001/<0.001	9 (12)	13 (2)	<0.001/<0.001
Post-stroke dementia	241 (27)	51 (36)	190 (25)	0.009/0.046	33 (52)	157 (23)	<0.001/0.001

Supplemental Table III. Assessed, testable vs untestable and numbers with a problem with cognitive testing at 6 month follow-up

	Total assessed	Untestable	Testable	p unadjusted/ adjusted	Tested but problem	Tested no problem	p unadjusted/ adjusted
	n=857	n=101	n=756		n=63	n=693	
Mean/sd age at event	73.3/11.8	75.9/11.7	73.5/11.8	0.054	79.1/10.3	73.0/11.8	
Male sex	418/857 (49)	42 (42)	376 (50)	0.12/0.020	23 (37)	353 (51)	0.028/0.087
Education (<12 years)	538 (63)	46 (73)	443 (64)	0.002/0.001	46 (73)	443 (64)	0.15/0.23
TIA (vs. stroke)	326/851 (38)	34 (34)	292 (39)	0.34/0.37	14 (22)	278 (40)	0.005/0.006
TIA	326 (38)	34 (34)	292 (39)	0.39/0.71	14 (22)	278 (40)	0.004/0.0042
Ischaemic stroke	504 (59)	62 (61)	442 (58)		49 (78)	393 (57)	
PICH	27 (3)	5 (5)	22 (3)		0	22 (3)	
TIA	326/857 (38)	34 (34)	292 (39)	<0.001/0.0003	14 (22)	278 (40)	<0.001/<0.001
Minor Stroke	360 (42)	32 (32)	328 (43)		22 (35)	306 (44)	
Major stroke	171 (20)	35 (34)	136 (18)		27 (43)	109 (16)	
Prior TIA	142/857 (17)	14 (14)	128 (17)	0.44/0.34	10 (16)	118 (17)	0.82/0.53
Prior stroke	125/857 (15)	20 (20)	105 (14)	0.11/0.16	6 (10)	99 (14)	0.3/0.16
Rankin ≥ 3	122/841 (15)	31 (33)	91 (12)	<0.001/<0.001	17 (28)	74 (11)	<0.001/0.002
Barthel < 20	183/837 (22)	29 (32)	154 (21)	0.014/0.044	22 (36)	132 (19)	0.002/0.027
Leukoaraiosis							
None	436/763 (57)	42 (49)	394 (58)	0.18/0.57	30 (51)	364 (59)	0.48/0.87
Mild	182 (24)	21 (25)	161 (24)		17 (29)	144 (23)	
Moderate/Severe	145 (19)	22 (26)	123 (18)		12 (20)	111 (18)	
Pre-stroke dementia	30 (4)	16 (16)	14 (2)	<0.001/<0.001	3 (5)	11 (2)	0.074/0.17
Post-stroke dementia	217 (26)	41 (48)	176 (24)	<0.001/<0.001	25 (42)	151 (22)	0.001/0.019

Supplemental Table IV. Assessed, tested vs untestable and numbers with a problem with cognitive testing at 1 year follow-up.

	Total assessed	Untestable	Testable	p unadjusted/ adjusted	Tested but problem	Tested no problem	p unadjusted/ adjusted
	n=792	n=97	n=692		n=58	n=637	
Mean/sd age at event	73.8 (11.8)	76.9/11.6	72.7/11.8	0.0013	78.2/11.2	72.2/11.7	0.0002
Male sex	378 (48)	37 (38)	341 (49)	0.044/0.11	21 (36)	520 (50)	0.041/0.11
Education (<12 years)	501 (63)	51 (53)	450 (65)	0.02/0.009	45 (78)	405 (64)	0.033/0.062
TIA (vs. stroke)	306 (39)	40 (41)	266 (38)	0.57/0.54	14 (24)	252 (40)	0.021/0.02
TIA	306 (39)	40 (41)	266 (38)	0.83/0.78	14 (24)	252 (40)	0.019/0.01
Ischaemic stroke	466 (59)	55 (57)	411 (59)		44 (76)	367 (58)	
PICH	20 (3)	2 (2)	18 (3)		0	18 (3)	
TIA	306 (39)	40 (41)	266 (38)	0.001/<0.001	14 (24)	252 (40)	<0.001/<0.001
Minor Stroke	340 (43)	28 (29)	312 (45)		19 (33)	293 (46)	
Major stroke	146 (18)	29 (30)	117 (17)		25 (43)	92 (14)	
Prior TIA	129 (16)	15 (15)	114 (16)	0.82/0.59	9(16)	105 (16)	0.85/0.57
Prior stroke	107 (14)	17 (18)	90 (13)	0.22/0.34	6 (10)	84 (13)	0.54/0.38
Rankin ≥ 3	96 (12)	25 (28)	71 (10)	<0.001/<0.001	17 (30)	54 (9)	<0.001/<0.001
Barthel < 20	152/775 (20)	27 (31)	125 (18)	0.005/0.044	21 (38)	104 (16)	<0.001/0.002
Leukoaraiosis							
None	424/711 (60)	42 (48)	382 (61)	0.063/0.62	31 (57)	351 (62)	0.84/0.37
Mild	164 (23)	27 (31)	137 (22)		13 (24)	124 (22)	
Moderate/Severe	123 (17)	18 (21)	105 (17)		10 (19)	95 (17)	
Pre-stroke dementia	23 (3)	12 (12)	11 (2)	<0.001/<0.001	4 (7)	7 (1)	0.001/0.002
Post-stroke dementia	191 (25)	36 (42)	155 (23)	<0.001/0.001	27 (50)	128 (20)	<0.001/<0.001

Supplemental Table V. Assessed, tested vs untestable and numbers with a problem with cognitive testing at 5 year follow-up

	Total assessed	Untestable	Testable	p unadjusted/ adjusted	Tested but problem	Tested no problem	p unadjusted/ adjusted
	n=567	n=95	n=472		n=63	n=409	
Mean/sd age at event	75.1 (11.57)	74.0/11.6	69.8/11.5	0.0012	75.4/11.1	69.0/11.3	<0.001
Male sex	279 (49)	42 (44)	237 (50)	0.29/0.53	32 (51)	205 (50)	0.92/0.53
Education (<12 years)	359 (63)	55 (58)	304 (64)	0.23/0.10	47 (75)	257 (63)	0.07/0.21
TIA (vs. stroke)	236 (42)	46 (48)	190 (40)	0.14/0.13	20 (32)	170 (42)	0.14/0.14
TIA	236 (42)	46 (48)	190 (40)	0.21/0.19	20 (32)	170 (42)	0.24/0.28
Ischaemic stroke	314 (55)	45 (47)	269 (57)		42 (67)	227 (56)	
PICH	17 (3)	4 (4)	13 (3)		1 (2)	12 (3)	
TIA	236 (42)	46 (48)	190 (40)	<0.001/<0.001	20 (32)	170 (42)	0.004/0.01
Minor Stroke	240 (42)	23 (24)	217 (46)		26 (41)	191 (47)	
Major stroke	91 (16)	26 (28)	65 (14)		17 (27)	48 (12)	
Prior TIA	84 (15)	13 (14)	71 (15)	0.73/0.52	9 (14)	62 (15)	0.86/0.56
Prior stroke	72 (13)	13 (14)	59 (12)	0.75/0.97	8 (13)	51 (12)	0.96/0.78
Rankin ≥ 3	40 (7)	13 (15)	27 (6)	0.003/0.008	6 (10)	21 (5)	0.15/0.31
Barthel < 20	83/555 (15)	13 (15)	70 (15)	0.96/0.62	15 (25)	55 (13)	0.023/0.16
Leukoaraiosis							
None	326/501 (65)	55 (63)	271 (65)	0.78/0.45	27 (48)	244 (68)	0.008/0.26
Mild	101 (20)	17 (20)	84 (20)		15 (27)	69 (19)	
Moderate/Severe	74 (15)	15 (17)	59 (14)		14 (25)	45 (13)	
Pre-stroke dementia	10 (2)	7 (70)	3 (1)	<0.001/<0.001	1 (2)	2 (1)	0.31/0.40
Post-stroke dementia	87 (16)	29 (33)	58 (12)	<0.001/<0.001	21 (34)	37 (9)	<0.001/<0.001