

SUPPLEMENTAL MATERIAL

Table I: Cross check of prospectively and retrospectively recruited stroke cases.

Variable	Retrospective (82)		Prospective (20)		p value
	N	%	n	%	
Demographics					
Median age at presentation (yrs)	8.23		7.56		0.29
Sex	42	51	6	30	0.09
Well in the week before presentation	74	90	16	80	0.25
PMHx	34	41	10	50	0.49
Symptoms					
Sudden onset symptoms	69	84	18	90	0.73
Woke with symptoms	17	21	3	17	1
Low GCS	6	7	3	15	0.28
Focal weakness	49	60	9	45	0.32
Ataxia	17	21	1	5	0.11
Seizures	15	18	6	30	0.35
Altered mental state	24	29	7	35	0.60
Loss of consciousness	6	7	3	15	0.37
Speech disturbance	30	37	7	35	1
Sensory disturbance	11	13	6	30	0.11
Headache	46	58	12	60	1
Visual disturbance	15	19	2	10	0.51
Vomiting	26	32	6	30	1
Dizziness	15	18	1	5	0.29
Vertigo	2	3	0	0	1
Other symptoms	3	4	2	10	0.25

*Fishers Exact test was used to compare binary variables of interest and the Wilcoxon-Mann-Whitney Rank Sum test to compare continuous variables. Abbreviations: PMHx Past medical history. GCS: Glasgow Coma Score. Yrs: Years. Mins: minutes. N: number. %: Percentage.

Table II: Univariate analyses of demographic factors, time course, symptoms and signs associated with AIS subtype and mimic diagnoses.

	Total	AIS n=55	Mimic n=280				
Demographics Factors	n (%) present	n= (%)	n= (%) present	OR	95% LCI	95% UCI	p value
Male sex	156/335 (47%)	25/55 (45%)	131/280 (47%)	0.95	0.53	1.69	0.86
Past medical history	130/355 (39%)	25/55 (45%)	105/280 (38%)	1.39	0.78	2.49	0.27
Sudden symptom onset	244/335 (74%)	46/55 (84%)	198/276 (71%)	2.01	0.94	4.31	0.07
Woke with symptoms	61/326 (19%)	11/53 (21%)	50/273 (18%)	1.17	0.56	2.43	0.68
Well in the week prior	246/334 (74%)	44/55 (80%)	202/279 (72%)	1.52	0.75	3.10	0.25
Symptom	n= (%)	n= (%)	n= (%)	OR	95% LCI	95% UCI	p value
Headache	187/333 (56%)	26/53 (49%)	161/280 (58%)	0.71	0.40	1.28	0.26
Vomiting	112/333 (34%)	9/53 (17%)	103/380 (37%)	0.35	0.16	0.75	0.007
Focal weakness	133/331 (40%)	40/55 (73%)	93/276 (34%)	5.25	2.76	9.99	<0.001
Focal numbness	77/329 (23%)	9/55 (16%)	68/274 (25%)	0.59	0.28	1.27	0.18
Visual disturbance	74/329 (22%)	8/53 (15%)	66/276 (24%)	0.57	0.25	1.26	0.16
Seizure	69/335 (20%)	12/55 (22%)	57/280 (20%)	1.09	0.54	2.21	0.81
Altered mental status	64/333 (19%)	11/55 (20%)	53/278 (19%)	1.06	0.51	2.19	0.87
Dizziness	65/328 (20%)	7/52 (13%)	58/276 (21%)	0.58	0.25	1.36	0.21
Speech disturbance	71/332 (22%)	28/55 (51%)	43/277 (16%)	5.64	3.03	10.50	<0.001
Ataxia	54/330(16%)	13/54 (24%)	41/276 (15%)	1.82	0.90	3.68	0.10
Loss of consciousness	35/333 (11%)	0/55 (0%)	35/278 (13%)	1.00	Omitted	Omitted	
Vertigo	12/324 (3%)	2/50 (4%)	10/274 (4%)	1.10	0.23	5.18	0.90

Other symptoms	60/344 (18%)	1/55 (2%)	59/279 (21%)	0.07	0.01	0.51	0.009
Sign	n= (%)	n= (%)	n= (%)	OR	95% LCI	95% UCI	p value
Face weakness	77/334 (23%)	36/55 (65%)	41/279 (15%)	11.00	5.76	21.01	<0.001
Arm weakness	63/334 (19%)	36/55 (54%)	27/279 (10%)	17.68	8.93	35.01	<0.001
Leg weakness	65/334 (19%)	30/55 (55%)	35/279 (13%)	8.37	4.42	15.84	<0.001
Dysarthria	30/330 (9%)	19/52 (37%)	114/278 (4%)	13.98	6.12	31.92	<0.001
Dysphasia	14/330 (4%)	7/52 (13%)	7/278 (3%)	6.02	2.02	17.99	0.001
Ataxia	35/336 (10%)	6/55 (11%)	29/279 (10%)	1.06	0.42	2.68	0.91
Inability to walk	43/329 (13%)	14/54 (26%)	29/275 (11%)	2.97	1.45	6.10	0.003
Abnormal eye movement	27/332 (8%)	3/55 (5%)	24/277 (9%)	0.61	0.18	2.09	0.43
Visual defects	25/322 (8%)	4/45 (9%)	21/277 (8%)	1.19	0.39	3.64	0.76
Facial sensory disturbance	17/328 (5%)	5/55 (9%)	12/273 (4%)	2.18	0.73	6.44	0.16
Arm sensory disturbance	33/330 (17%)	9/55 (17%)	24/275 (9%)	2.05	0.89	4.68	0.09
Leg sensory disturbance	27/329 (8%)	7/55 (13%)	20/274 (7%)	1.85	0.74	4.62	0.19
GCS abnormal (<15)	85/335 (25%)	15/55 (27%)	70/280 (25%)	1.13	0.59	2.16	0.72
GCS<9	9/335 (3%)	0/55 (0%)	9/280 (3%)	1.00	Omitted	Omitted	
Abnormal pupil response	7/314 (3%)	1/54 (2%)	6/260 (2%)	0.80	0.09	6.77	0.84
Sensory neglect	4/333 (1%)	2/55 (4%)	2/278 (0.7%)	5.21	0.72	37.79	0.10
Other neurological signs	30/334 (9%)	7/55 (13%)	23/279 (8%)	1.62	0.66	3.99	0.29
No focal neurological signs	105/334 (31%)	3/55 (5%)	102/279 (37%)	0.10	0.03	0.33	<0.001

OR: unadjusted odds ratios. LCI: lower 95% confidence interval. UCI: Upper 95% confidence interval. n: number. %: percentage. GCS: Glasgow coma score. Other symptoms included pain or stiffness, lethargy, gait disturbance, fever, involuntary movements, nausea and irritability. Other signs included abnormal DTRs, confusion, altered consciousness or slowed mentation, involuntary movements, papilloedema.

Table III: Univariate analyses of demographic factors, time course, symptoms and signs associated with HS subtype and mimic diagnoses.

	Total	HS n=37	Mimic n=280				
Demographics factors	n (%) present	n= (%)	n= (%)	OR	95% LCI	95% UCI	p value
Male sex	152/317 (48%)	21/37(57%)	131/280 (47%)	1.49	0.75	2.98	0.26
Past medical history	116/317(37%)	11/37 (30%)	105/280 (37%)	0.71	0.33	1.49	0.36
Sudden symptom onset	231/313 (74%)	33/37 (89%)	198/276 (71%)	3.25	1.11	9.48	0.031
Woke with symptoms	57/310 (18%)	7/37 (19%)	50/273 (18%)	1.04	0.43	2.50	0.93
Well in the week prior	239/316(76%)	37/37 (100%)	202/279 (72%)	1.00	Omitted	Omitted	
Symptom	n= (%)	n= (%)	n= (%)	OR	95% LCI	95% UCI	p value
Headache	189/317 (60%)	28/37 (76%)	161/280 (58%)	2.30	1.05	5.05	0.04
Vomiting	126/317(40%)	23/37 (62%)	103/380 (37%)	2.82	1.39	5.73	0.004
Focal weakness	104/313 (33%)	11/37 (30%)	93/276 (34%)	0.83	0.39	1.76	0.63
Focal numbness	73/311 (23%)	5/37 (14%)	68/274 (25%)	0.47	0.18	1.26	0.14
Visual disturbance	74/313 (24%)	8/37 (22%)	66/276 (24%)	0.88	0.38	2.01	0.76
Seizure	65/317 (21%)	8/37 (22%)	57/280 (20%)	1.08	0.47	2.49	0.86
Altered mental status	72/315 (23%)	19/37 (51%)	53/278 (19%)	4.48	2.20	9.12	<0.0001
Dizziness	66/313 (21%)	8/37 (22%)	58/276 (21%)	1.04	0.45	2.39	0.93
Speech disturbance	48/314 (15%)	5/37 (14%)	43/277 (16%)	0.85	0.31	2.30	0.75
Ataxia	43/313 (14%)	2/37 (5%)	41/276 (15%)	0.33	0.08	1.41	0.14
Loss of consciousness	44/315 (14%)	9/37 (24%)	35/278 (13%)	2.23	0.97	5.12	0.06
Vertigo	10/311 (3%)	0/37 (0%)	10/274 (4%)	1.00	Omitted	Omitted	

Other symptoms	63/316 (20%)	4/37 (11%)	59/279 (21%)	0.45	0.15	1.33	0.15
Individual sign	n= (%)	n= (%)	n= (%)	OR	95% LCI	95% UCI	p value
Face weakness	46/313 (15%)	5/34 (15%)	41/279 (15%)	1.00	0.37	2.73	0.999
Arm weakness	34/313 (11%)	7/34 (21%)	27/279 (10%)	2.42	0.96	6.08	0.06
Leg weakness	40/313 (13%)	5/34 (15%)	35/279 (13%)	1.20	0.44	3.31	0.72
Dysarthria	13/312 (4%)	2/34 (6%)	114/278 (4%)	1.52	0.32	7.15	0.60
Dysphasia	9/312 (3%)	2/34 (6%)	7/278 (3%)	2.42	0.48	12.15	0.28
Ataxia	30/313 (10%)	1/34 (3%)	29/279 (10%)	0.26	0.03	1.98	0.19
Inability to walk	45/309 (15%)	16/34 (47%)	29/275 (11%)	7.54	3.47	16.38	<0.0001
Abnormal eye movement	26/311 (8%)	2/34 (6%)	24/277 (9%)	0.66	0.15	2.92	0.58
Visual defects	25/311 (8%)	4/34 (12%)	21/277 (8%)	1.63	0.52	5.05	0.40
Facial sensory disturbance	13/307 (4%)	1/34 (3%)	12/273 (4%)	0.66	0.08	5.23	0.69
Arm sensory disturbance	26/309 (8%)	2/34 (6%)	24/275 (9%)	0.65	0.15	2.90	0.57
Leg sensory disturbance	22/308 (7%)	2/34 (6%)	20/274 (7%)	0.79	0.18	3.55	0.76
GCS abnormal (<15)	90/317 (29%)	20/37 (54%)	70/280 (25%)	3.53	1.75	7.11	<0.0001
GCS<9	18/317 (6%)	9/37 (24%)	9/280 (3%)	9.68	3.55	26.38	<0.0001
Abnormal pupil response	9/294 (3%)	3/34 (9%)	6/260 (2%)	4.10	0.98	17.21	0.05
Sensory neglect	3/312 (0.6%)	1/34 (3%)	2/278 (0.7%)	4.18	0.37	47.38	0.25
Other neurological signs	25/316 (8%)	2/37 (5%)	23/279 (8%)	0.64	0.14	2.81	0.55
No focal neurological signs	117/314 (37%)	15/35 (43%)	102/279 (37%)	1.30	0.64	2.65	0.47

OR: unadjusted odds ratios. LCI: lower 95% confidence interval. UCI: Upper 95% confidence interval. n: number. %: percentage. GCS: Glasgow coma score. Other symptoms included pain or stiffness, lethargy, gait disturbance, fever, involuntary movements, nausea and irritability. Other signs included abnormal DTRs, confusion, altered consciousness or slowed mentation, involuntary movements, papilloedema.