SUPPLEMENTAL MATERIAL

Lesion Localization of Post-Stroke Lateropulsion

Suzanne R. Babyar, PT, PhD,[1,5] Anna Smeragliuolo, BS,[2] Fatimah M. Albazron, MS,[3] David Putrino, PhD,[2,4] Michael Reding, MD,[5] Aaron D. Boes, MD, PhD[3]

[1] Department of Physical Therapy, Hunter College, The City University of New York, 425 East 25th Street, New York, New York, USA, 10010
[2] Department of Telemedicine and Virtual Rehabilitation, Burke Medical Research Institute, 785 Mamaroneck Ave, White Plains, New York, USA, 10605
[3] Iowa Neuroimaging and Noninvasive Brain Stimulation Laboratory, Departments of Pediatrics, Neurology & Psychiatry, University of Iowa Hospitals and Clinics, 200 Hawkins Drive, Iowa City, USA, 52242
[4] Department of Rehabilitation and Human Performance, Icahn School of Medicine at Mount Sinai, 1 Gustave L. Levy Place, New York, New York, USA, 10029
[5] Neurology, Stroke Unit, Burke Rehabilitation Hospital, 785 Mamaroneck Avenue, White Plains, New York, USA, 10605

Supplemental Tables

Table I. Patients with Left Brain Lesion: Admission and Discharge Characteristics of Patients with (Pusher) and without

Lateropulsion (Non-Pusher) and Results of Paired *t*-Tests

Characteristic	N	Admission Non-Pusher	Admission Pusher	P Value	N	Discharge Non-Pusher	Discharge Pusher	P Value
Age, Mean (SD), y	28	77.3 (8.0	76.9 (8.8)	NS				
Time since Stroke Onset, Mean (SD), d	28	9.2 (5.8)	9.6 (5.9)	NS				
Admission Lower Extremity Motricity Index Involved Side, Mean (SD)	28	49.5 (34.8)	42.4 (34.2)	NS				
Admission Upper Extremity Motricity Index Involved Side, Mean (SD)	28	43.2 (39.1)	33.1 (36.6)	NS				
Burke Lateropulsion Scale Score, Mean (SD)	25	0.2 (0.6)	4.3 (3.1)	<0.001	19	0.0 (0.0)	2.1 (2.1)	<0.001
Upper Extremity Fugl-Meyer Motor Score, Mean (SD)	9	17.7 (23.4)	21.8 (21.5)	NS	5	15.6 (17.1)	26.2 (20.0)	NS
Lower Extremity Fugl-Meyer Motor Score, Mean (SD)	21	10.8 (9.5)	10.4 (8.3)	NS	15	18.1 (10.9)	17.3 (8.9)	NS

Cognitive FIM, Mean (SD)	27	16.7 (13.5)	12.6 (5.3)	NS	27	24.6 (17.7)	19.1 (8.9)	NS
Motor FIM, Mean (SD)	28	17.8 (5.5)	17.3 (5.2)	NS	27	32.4 (16.7)	29.9 (14.1)	NS
Total FIM, Mean (SD)	27	34.5 (15.5.)	29.8 (9.0)	NS	27	57.0 (23.8)	48.9 (19.6)	NS
Fugl-Meyer Balance Score, Mean (SD)	21	4.5 (2.0)	3.5 (2.3)	NS	18	7.8 (2.3)	5.9 (2.4)	0.007
Line Crossing Total Score, Mean (SD)	13	32.1 (8.8)	32.4 (9.9)	NS	6	33.0 (4.8)	35.8 (0.4)	NS
Star Cancellation Total Score, Mean (SD)	4	37.0 (24.5)	40.3 (26.8)	NS	7	49.3 (4.4)	48.3 (8.9)	NS

NS = not significant; Time since Onset of Stroke = count of days from stroke onset as recorded in acute care hospital admission record and the day of admission to inpatient rehabilitation.

Table II. Patients with Right Brain Lesion: Admission and Discharge Characteristics of Patients with (Pusher) and without

Lateropulsion (Non-Pusher) and Results of Paired t-Tests

		Admission				Discharge		
Characteristic	N	Non-Pusher	Pusher	P Value	N	Non-Pusher	Pusher	P Value
Age, Mean (SD), y	22	75.8 (12.0)	76.1 (12.3)	NS				
Time since Stroke Onset, Mean (SD), d	22	7.6 (5.3)	8.4 (5.0)	NS				
Admission Lower Extremity Motricity Index Involved Side, Mean (SD)	22	55.7 (31.3)	33.7 (30.0)	0.014				
Admission Upper Extremity Motricity Index Involved Side, Mean (SD)	22	45.9 (37.0)	25.0 (30.2)	0.036				
Burke Lateropulsion Scale Score, Mean (SD)	22	0.2 (0.5)	4.8 (2.9)	<0.001	17	0.1 (0.2)	3.7 (3.5)	0.001
Upper Extremity Fugl-Meyer Motor Score, Mean (SD)	9	15.8 (16.3)	15.2 (13.3)	NS	5	28.8 (28.9)	29.8 (23.8)	NS
Lower Extremity Fugl-Meyer Motor Score, Mean (SD)	21	14.1 (8.4)	7.8 (6.5)	0.008	15	19.0 (9.5)	14.3 (9.1)	NS
Cognitive FIM, Mean (SD)	22	21.5 (4.4)	19.1 (5.4)	NS	22	29.5 (12.7)	24.7 (7.8)	NS
Motor FIM, Mean (SD)	22	21.8 (5.8)	19.9 (5.7)	0.034	22	40.8 (18.8)	32.7 (14.7)	NS

Total FIM, Mean (SD)	22	43.3 (8.0)	39.0 (9.6)	0.019	22	70.3 (23.1)	57.5 (18.1)	0.017
Fugl-Meyer Balance Score, Mean (SD)	21	5.6 (2.4)	4.0 (1.8)	0.043	17	7.9 (2.5)	5.4 (2.5)	0.002
Line Crossing Total Score, Mean (SD)	17	31.4 (8.3)	27.9 (12.2)	NS	6	28.8 (12.1)	33.3 (4.8)	NS
Star Cancellation Total Score, Mean (SD)	8	28.5 (19.1)	42.3 (15.9)	NS	8	40.9 (15.9)	42.4 (15.7)	NS

NS = not significant; Time since Onset of Stroke = count of days from stroke onset as recorded in acute care hospital admission record

and the day of admission to inpatient rehabilitation.