

Table 2: Reaching movement kinematics in patients with focal hand dystonia (FHD), cervical dystonia (CD) and in healthy subjects (HS), before (baseline) and after (POST1 and POST2) real and sham cerebellar cTBS.

	Real cTBS			Sham cTBS		
	baseline	Post1	Post2	baseline	Post1	Post2
<u>FHD Patients</u>						
Duration	485.44±25.31	486.92±25.52	482.11±23.49	506.69±30.84	498.65±27.49	492.76±25.86
Velocity peak	1.42±0.09	1.44±0.10	1.41±0.10	1.32±0.08	1.39±0.09	1.41±0.09
Acceleration peak	8.95±0.78	9.29±0.94	9.02±0.88	7.97±0.73	8.66±0.85	8.84±0.90
Straightness	105.16±0.63	104.90±0.64	104.08±0.56	104.85±0.61	104.91±0.62	104.41±0.55
Smoothness	1.30±0.17	1.35±0.27	1.12±0.07	1.61±0.27	1.28±0.10	1.15±0.06
Overshooting	7.62±1.35	7.93±1.06	7.45±1.43	5.48±0.93	6.12±0.07	5.88±0.97
<u>CD Patients</u>						
Duration	512.13±27.81	521.96±25.18	519.97±23.90	524.38±23.04	509.07±22.72	509.73±21.70
Velocity peak	1.39±0.08	1.38±0.08	1.37±0.08	1.37±0.10	1.39±0.08	1.39±0.09
Acceleration peak	8.28±0.76	8.14±0.85	8.19±0.89	7.43±0.64	8.09±0.78	8.30±0.89
Straightness	105.17±0.84	105.85±1.07	105.29±1.07	104.00±0.49	104.25±0.79	104.10±0.73
Smoothness	1.19±0.08	1.10±0.03	1.08±0.04	1.30±0.16	1.14±0.05	1.16±0.04
Overshooting	6.01±1.46	4.59±0.75	4.46±0.70	5.36±0.96	5.98±1.40	4.77±0.82
<u>HS</u>						
Duration	470.47±19.96	482.50±20.10	476.50±20.98	458.83±19.71	475.56±19.82	479.58±23.30
Velocity peak	1.50±0.07	1.49±0.09	1.50±0.08	1.56±0.010	1.48±0.08	1.49±0.09
Acceleration peak	9.34±0.67	9.22±0.78	9.52±0.75	9.36±0.73	9.38±0.80	9.43±0.73
Straightness	104.64±0.29	104.61±0.45	104.70±0.50	105.27±0.45	105.72±0.59	105.25±0.43
Smoothness	1.32±0.14	1.39±0.19	1.23±0.13	1.19±0.10	1.10±0.05	1.16±0.10
Overshooting	7.21±1.45	7.42±1.04	6.23±1.11	6.52±1.59	7.58±1.23	6.26±1.07

Duration is expressed in ms. Velocity peak is expressed in m/s. Acceleration peak is expressed in m/sec². Straightness refers to the index of curvature, i.e. the percentage ratio between the arm average path length and the length of a straight line joining the initial and final positions. Smoothness refers the number of units of the reaching movement velocity curves. Overshooting is expressed in mm. Values are means ± 1 standard error of the mean.