

Supplementary Materials

Characterization of motor evoked responses obtained with transcutaneous electrical spinal stimulation from the lower-limb muscles post stroke

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S1 Table: Statistical results of resting motor threshold as a function of group and side.

Resting Motor Threshold (mA)		Paretic (Non-Dominant)		Non-Paretic		Group effect	Group Difference post-hoc analysis	Side effect
		Mean	S.E.	Mean	S.E.			
TA	Stroke	128.98	10.83	116.52	13.61	$F_{(2,27)}=13.73$, $p<.001^*$, $\eta^2=.50$	Stroke vs. Age-Matched: $p=0.041^*$	$t_{(9)}=1.12$, $p=.293$
	Age-Matched	93.56	6.50	--	--		Stroke vs. Young: $p<0.001^*$	
	Young	63.71	6.89	--	--		Age-Matched vs. Young: $p=0.005^*$	
MG	Stroke	128.68	12.52	121.25	9.85	$F_{(2,27)}=9.89$, $p=.001^*$, $\eta^2=.42$	Stroke vs. Age-Matched: $p=0.032^*$	$t_{(9)}=0.57$, $p=.585$
	Age-Matched	93.18	9.53	--	--		Stroke vs. Young: $p<0.001^*$	
	Young	67.19	4.98	--	--		Age-Matched vs. Young: $p=0.038^*$	

Note: For group comparison, sMEP data of the paretic-side of the stroke group were compared with that of the non-dominant side of the healthy controls. Note: $*$ = p -value less than 0.050. TA=Tibialis Anterior; MG=Medial Gastrocnemius

S2 Table: Statistical results of slope of the sMER recruitment curve as a function of group and side.

	Slope (normalized EMG/mA)	Paretic (Non-Dominant)		Non-Paretic		Group effect	Group Difference post-hoc analysis	Side effect
		Mean	S.E.	Mean	S.E.			
TA	Stroke	0.0341	0.0110	0.0292	0.0075	$F_{(2,27)}=0.09$, $p=.910$	N/A	$t_{(9)}=0.23$, $p=.827$
	Age-Matched	0.0291	0.0071	--	--			
	Young	0.0305	0.0060	--	--			
MG	Stroke	0.0340	0.0080	0.0312	0.0067	$F_{(2,27)}=0.34$, $p=.718$	N/A	$t_{(9)}=0.15$, $p=.882$
	Age-Matched	0.0252	0.0057	--	--			
	Young	0.0294	0.0064	--	--			

Note: For group comparison, sMEP data of the paretic-side of the stroke group were compared with that of the non-dominant side of the healthy controls. Note: *= p -value less than 0.050. TA=Tibialis Anterior; MG=Medial Gastrocnemius, N/A=Not applicable post-hoc analysis due to lack of statistical significance of the main effect.

S3 Table: Statistical result of onset latency as a function of group and side.

Latency (ms)		Paretic (Non-Dominant)		Non-Paretic		Group effect	Group Difference post-hoc analysis	Side effect
		Mean	S.E.	Mean	S.E.			
TA	Stroke	19.33	0.50	16.77	0.80	$F_{(2,27)}=14.44$, $p<.001^*$, $\eta^2=.52$	Stroke vs. Age-Matched: $p<0.001^*$ Stroke vs. Young: $p<0.001^*$ Age-Matched vs. Young: $p=0.956$	$t_{(9)}=2.82$, $p=0.020$, $d=0.35$
	Age-Matched	15.91	0.49	--	--			
	Young	15.96	0.53	--	--			
MG	Stroke	17.89	1.03	16.74	0.56	$F_{(2,27)}=1.72$, $p=.198$	N/A	$t_{(9)}=1.17$, $p=.272$
	Age-Matched	16.63	0.69	--	--			
	Young	15.87	0.44	--	--			

Note: For group comparison, sMEP data of the paretic-side of the stroke group were compared with that of the non-dominant side of the healthy controls. Note: $*$ = p -value less than 0.050. TA=Tibialis Anterior; MG=Medial Gastrocnemius, N/A=Not applicable post-hoc analysis due to lack of statistical significance of the main effect.