

Materials List for

Standing Neurophysiological Assessment of Lower Extremity Muscles Post-Stroke

John Harvey Kindred^{1,2}, Christian Finetto³, Jasmine Jamilah Cash³, Mark Goodman Bowden^{1,2,3}

¹Department of Research and Development, Ralph H. Johnson Veterans Administration Medical Center ²College of Health Professions, Department of Rehabilitation Sciences, Division of Physical Therapy, Medical University of South Carolina ³College of Health Professions, Department of Health Sciences and Research, Medical University of South Carolina

Corresponding Authors		Citation	
John Harvey Kindred kindred@musc.edu	Mark Goodman Bowden bowdenm@musc.edu	Kindred, J.H., Finetto, C., Cash, J.J., Bowden, M.G. Standing Neurophysiological Assessment of Lower Extremity Muscles Post-Stroke. <i>J. Vis. Exp.</i> (173), e62601, doi:10.3791/62601 (2021).	
Date Published		DOI	URL
July 26, 2021		10.3791/62601	jove.com/video/62601

Materials

Name	Company	Catalog Number	Comments
Data Acquisition Software	MathWorks	MatLab	The custom data collection program was written in Matlab. However, other software/hardware providers can be used (e.g. National Instruments, AD Instruments, CED Spike2 or Signal)
Double-cone coil	Magstim	D110	Double-cone coil for TMS pulse delivery
Dual force plate	Advanced Mechanical Technology Inc (AMTI)	Dual-top Accusway	Force plate used to measure force/ weight distrobution under each leg independently.
Dual-pulse TMS	Magstim	Bistim 200	Connects two Magstim 200 units together for dual-pulse applications
EMG pre-amplifiers	Motion Labs Inc	MA-422	Preamplifiers for disposable surface EMG electrodes
EMG system	Motion Labs Inc	MA400	EMG system for data collection
Neuronavigation System	Rogue Research	Brainsight	Software and hardware used to ensure consistent placement/delivery of magnetic stimulations. Marking the stimulation location on a participant's head or on a place showercap can also be used in the absence of neuronavigational software.
Recruitment Database	N/A	N/A	Electronic database including names of possible individuals who are eligble for your studies.
TMS unit (x2)	Magstim	Magstim 200	Delivers TMS pulses