

Supplementary material has been published as submitted. It has not been copyedited, or typeset by Journal of Rehabilitation Medicine

**Table S1.** Four ROIs related to hand movement

ID	Region	Abbreviation	Side	Channel
1	Primary sensorimotor cortex	SM1	L	14 32 33
			R	16 17 30
2	Dorsolateral prefrontal cortex	DLPFC	L	9 11 12 24 25 26 27
			R	3 4 5 19 20 21 23
3	Primary motor cortex	PMC	L	28 29 34 35
			R	1 15 18 31
4	Primary somatosensory cortex	S1	L	13 14 32
			R	2 16 17

**Table S2.** Comparison of Brain Area Activation Between Resting State and Grasping Task.

ROIs	Task	M(P25, P75)	Wilcoxon's two samples rank sum test	
			Z value	P value
left SM1	rest state	0.016(0.011, 0.019)	18.892	P<0.001
	grasping task	0.050(0.008, 0.051)		
right SM1	rest state	0.012(0.007, 0.015)	19.208	P<0.001
	grasping task	0.046(0.006, 0.051)		
left DLPFC	rest state	0.006(0.002, 0.009)	21.236	P<0.001
	grasping task	0.034(0.010, 0.038)		
right DLPFC	rest state	0.021(0.015, 0.024)	17.381	P<0.001
	grasping task	0.037(0.014, 0.042)		
left PMC	rest state	-0.001(-0.005, 0.002)	22.238	P<0.001
	grasping task	0.043(0.006, 0.045)		
right PMC	rest state	0.007(0.004, 0.011)	18.493	P<0.001
	grasping task	0.037(0.008, 0.040)		
left S1	rest state	0.016(0.010, 0.019)	19.145	P<0.001
	grasping task	0.046(0.008, 0.049)		
right S1	rest state	0.010(0.005, 0.013)	19.684	P<0.001
	grasping task	0.042(0.007, 0.049)		

**Table S3.** Comparison of Brain Area Activation Between Resting State and handbike Task.

ROIs	Task	M(P25, P75)	Wilcoxon's two samples rank sum test	
			Z value	P value
left SM1	rest state	0.016(0.011, 0.019)	17.331	P<0.001
	handbike task	0.039(0.008, 0.048)		
right SM1	rest state	0.012(0.007, 0.015)	19.938	P<0.001
	handbike task	0.045(0.008, 0.056)		
left DLPFC	rest state	0.006(0.002, 0.009)	9.974	P<0.001
	handbike task	0.012(0.005, 0.021)		
right DLPFC	rest state	0.021(0.015, 0.024)	7.284	P<0.001
	handbike task	0.017(0.006, 0.026)		
left PMC	rest state	-0.001(-0.005, 0.002)	21.576	P<0.001
	handbike task	0.037(0.007, 0.043)		
right PMC	rest state	0.007(0.004, 0.011)	18.040	P<0.001
	handbike task	0.034(0.007, 0.039)		
left S1	rest state	0.016(0.010, 0.019)	17.709	P<0.001
	handbike task	0.039(0.008, 0.048)		
right S1	rest state	0.010(0.005, 0.013)	19.617	P<0.001
	handbike task	0.041(0.007, 0.049)		