

**Supplementary Table 1.** The characteristics of patients between DCM and control

Variable	All (n = 1,702)	DCM (n = 508)	Control (n = 1,194)	p-value
Age (yr)	44.75 ± 14.68	56.29 ± 11.01	39.84 ± 13.22	< 0.001 <sup>*,†</sup>
Sex				< 0.001 <sup>*,‡</sup>
Female	865 (50.82)	201 (39.57)	664 (55.61)	
Male	837 (49.18)	307 (60.43)	530 (44.39)	
Parameters of 10-s G&R test				
No. of cycles	22.52 ± 7.24	16.55 ± 4.74	25.06 ± 6.59	< 0.001 <sup>*,†</sup>
Maximum time of G&R (sec)	0.33 ± 0.14	0.39 ± 0.17	0.30 ± 0.11	< 0.001 <sup>*,†</sup>
Minimum time of G&R (sec)	0.74 ± 0.38	0.92 ± 0.39	0.66 ± 0.35	< 0.001 <sup>*,†</sup>
CV of G&R (%)	20.47 ± 14.15	28.24 ± 18.48	17.16 ± 10.18	< 0.001 <sup>*,†</sup>
Average time of G (sec)	0.31 ± 0.23	0.46 ± 0.26	0.25 ± 0.18	< 0.001 <sup>*,†</sup>
Maximum time of G (sec)	0.21 ± 0.16	0.32 ± 0.21	0.16 ± 0.10	< 0.001 <sup>*,†</sup>
Minimum time of G (sec)	0.51 ± 0.49	0.66 ± 0.42	0.44 ± 0.50	< 0.001 <sup>*,†</sup>
CV of G (%)	27.83 ± 21.73	26.65 ± 17.14	28.33 ± 23.40	0.098 <sup>*,†</sup>
Average time of R (sec)	0.27 ± 0.20	0.28 ± 0.13	0.27 ± 0.23	0.214 <sup>*,†</sup>
Maximum time of R (sec)	0.18 ± 0.08	0.20 ± 0.08	0.17 ± 0.08	< 0.001 <sup>*,†</sup>
Minimum time of R (sec)	0.48 ± 0.55	0.38 ± 0.25	0.52 ± 0.63	< 0.001 <sup>*,†</sup>
CV of R (%)	28.28 ± 26.66	21.66 ± 13.10	31.09 ± 30.23	< 0.001 <sup>*,†</sup>
PROMs				
mJOA	-	13.86 ± 2.39	-	-
NDI	-	26.10 ± 14.47	-	-
SF-12-PCS	-	31.31 ± 9.96	-	-
SF-12-MCS	-	43.14 ± 9.04	-	-
JOACMEQ-Cervical spine function	-	73.54 ± 20.26	-	-
JOACMEQ-Upper extremity function	-	81.42 ± 18.46	-	-
JOACMEQ-Lower extremity function	-	66.20 ± 28.44	-	-
JOACMEQ-Bladder function	-	88.35 ± 14.73	-	-
JOACMEQ-Quality of life	-	42.66 ± 15.21	-	-

Values are presented as mean ± standard deviation or number (%).

DCM, degenerative cervical myelopathy; 10-s G&R, 10-second grip and release; CV, coefficient of variation; PROMs, patient-reported outcome measures; mJOA, modified Japanese Orthopaedic Association scale; NDI, Neck Disability Index; SF-12, 12-item Short Form health survey; PCS, physical composite score; MCS, mental composite score; JOACMEQ, Japanese Orthopaedic Association Cervical Myelopathy Evaluation Questionnaire.

\*p < 0.05 was regarded as statistically significant. <sup>†</sup>p-value was calculated by the 2-sample independent t-test. <sup>‡</sup>p-value was calculated by the chi-square test.