

**Table 2.** Morphometry of the cervical spinal cord in patients with hereditary spastic paraplegia (HSP). Results are shown for the control group (HC), the entire SPG group and for the subgroups defined according to the genotypes (SPG3A, SPG4, SPG7 and SPG11).

Metrics	Cervical level	HC (all) N=21	SPG (all) N=37	<i>p</i> value (HC x SPG)	SPG3A N=7	<i>p</i> value (HC x SPG3A)	SPG4 N=12	<i>p</i> value (HC x SPG4)	SPG7 N=10	<i>p</i> -value (HC x SPG7)	SPG11 N=8	<i>p</i> -value (HC x SPG11)
CSA (mm <sup>2</sup> )	C2	74.3 (8.4)	66.0 (13.8)	0.009	73.0 (21.4)	0.733	58.8 (10.5)	<0.001	69.0 (8.0)	0.423	60.9 (7.6)	0.027
	C3	75.9 (12.2)	66.6 (11.9)	0.010	69.9 (21.4)	0.685	63.0 (8.1)	0.013	73.5 (8.9)	0.263	65.1 (7.2)	0.015
	C4	76.6 (10.8)	71.6 (11.4)	0.006	74.6 (18.8)	0.393	71.5 (10.9)	0.009	74.3 (12.1)	0.230	67.5 (7.2)	0.045
GM (mm <sup>2</sup> )	C2	14.4 (2.6)	12.5 (2.4)	0.004	13.7 (3.2)	0.866	11.8 (1.8)	<0.001	13.6 (1.1)	0.339	11.8 (1.4)	0.009
	C3	14.8 (1.4)	13.1 (2.0)	0.009	13.7 (4.5)	0.894	13.1 (1.5)	0.006	14.3 (1.9)	0.264	12.5 (1.4)	0.006
	C4	17.5 (3.2)	15.0 (3.5)	0.020	13.9 (4.3)	0.360	15.0 (2.8)	0.312	16.2 (2.6)	0.512	12.0 (3.2)	0.004
WM (mm <sup>2</sup> )	C2	60.1 (7.2)	53.3 (10.7)	0.006	56.5 (19.1)	0.616	47.5 (9.0)	0.003	55.3 (7.3)	0.310	49.2 (7.3)	0.042
	C3	60.4 (11.2)	54.5 (10.1)	0.020	55.6 (18.5)	0.609	51.9 (6.5)	0.021	59.6 (7.8)	0.372	53.3 (5.4)	0.046
	C4	66.2 (12.6)	58.2 (7.5)	0.009	59.0 (12.6)	0.288	55.0 (7.5)	0.048	60.1 (8.5)	0.265	56.6 (7.5)	0.097

Metrics from cross-sectional total (CSA), gray matter (GM) and white matter (WM) areas for C2, C3 and C4 levels are expressed as median (interquartile range).

Comparison between patients and controls was done using the Mann-Whitney test, followed by FDR-correction to adjust for multiple comparisons.