

**Supplementary Table S1.** Muscle tone (expressed in Hz) in patients with axSpA and control subjects, stratified for body segment.

Variable	Patients n=27	Controls n=27	<i>p</i> -value
<b>Trunk</b>			
Average	14.3 (13.2–15.3)	14.2 (12.9–14.8)	0.53
Dominant	14.4 (12.9–16.0)	14.4 (12.8–15.1)	0.70
Non-dominant	14.2 (12.9–15.2)	14.1 (12.9–14.9)	0.72
<b>Upper limb</b>			
Average	16.7 (15.7–17.6)	16.3 (15.9–17.4)	0.66
Dominant	16.6 (15.8–18.1)	16.4 (15.7–17.5)	0.42
Non-dominant	16.2 (15.7–17.5)	16.8 (15.9–17.7)	0.61
<b>Lower limb</b>			
Average	16.7 (15.1–17.5)	16.3 (15.6–18.0)	0.92
Dominant	16.8 (14.9–18.9)	16.5 (15.6–18.1)	0.28
Non-dominant	16.0 (14.9–17.2)	16.2 (15.1–17.6)	0.67
<b>Total</b>	48.6 (44.9–50.1)	46.7 (45.0–49.3)	0.45

**Supplementary Table S2.** Muscle decrement (inverse of elasticity) in patients with axSpA and control subjects, stratified for body segment.

Variable	Patients n=27	Controls n=27	<i>p</i> -value
<b>Trunk</b>			
Average	1.1 (1.0–1.9)	1.1 (0.9–1.3)	0.40
Dominant	1.1 (1.1–1.5)	1.1 (0.9–1.3)	0.38
Non-dominant	1.1 (1.0–1.4)	1.1 (0.9–1.3)	0.57
<b>Upper limb</b>			
Average	1.0 (0.9–1.1)	1.1 (0.9–1.1)	0.38
Dominant	1.0 (0.9–0.9)	1.0 (1.0–1.1)	0.14
Non-dominant	1.0 (0.9–1.2)	1.1 (0.9–1.2)	0.91
<b>Lower limb</b>			
Average	1.2 (1.1–1.6)	1.3 (1.2–1.4)	0.45
Dominant	1.2 (1.1–1.5)	1.2 (1.1–1.5)	0.94
Non-dominant	1.2 (1.1–1.5)	1.4 (1.1–1.5)	0.49
<b>Total</b>	3.4 (3.0–3.9)	3.4 (3.3–3.7)	0.96

Values are presented as median (25<sup>th</sup>–75<sup>th</sup> percentile). “Average” refers to the mean of right and left sides of each segment, while “dominant” and “non-dominant” sides refer to the handedness of individuals.