

Supplementary Information

Gait spatiotemporal parameters and bilateral asymmetry in mild adolescent idiopathic scoliosis stratified by main curve location

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Supplementary Table S1. Baseline characteristics of healthy controls and adolescents with mild AIS.

Measure	Controls (n = 19)	Mild AIS (n = 42)	P
Age (years)	12.0 (11.0, 13.0)	13.0 (11.0, 14.0)	0.664
Sex (male/female), n	9/10	8/34	0.032
Height (cm)	163.0 (143.0, 166.0)	159.5 (150.0, 168.0)	0.988
Weight (kg)	42.0 (38.0, 50.0)	43.5 (35.8, 50.5)	0.956
BMI (kg/m ²)	17.12 (16.33, 19.03)	17.45 (15.50, 18.84)	0.840
Risser grade	3.0 (0.0, 4.0)	3.0 (0.0, 4.0)	0.885
Main curve Cobb angle (°)	—	15.3 (12.2, 18.7)	—

Values are medians (25th, 75th percentiles) or counts; sex is presented as male/female. Age, height, weight, BMI and Risser grade were compared using Mann–Whitney U tests with tie-corrected, two-sided asymptotic P values. Sex was compared using a two-sided Fisher’s exact test. Main curve Cobb angle is described only for the AIS group and was not compared between groups. An em dash indicates not applicable. AIS, adolescent idiopathic scoliosis; BMI, body mass index.

Supplementary Table S2. Baseline characteristics of healthy controls and AIS subgroups by main curve location.

Measure	Controls (n = 19)	Thoracic (n = 11)	TL/L (n = 31)	P
Age (years)	12.0 (11.0, 13.0)	13.0 (11.0, 15.0)	12.0 (11.0, 13.0)	0.602
Sex (male/female), n	9/10	4/7	4/27	0.027
Height (cm)	163.0 (143.0, 166.0)	168.0 (143.0, 172.0)	158.0 (150.0, 164.0)	0.365
Weight (kg)	42.0 (38.0, 50.0)	50.0 (35.0, 59.0)	42.0 (36.0, 50.0)	0.629
BMI (kg/m ²)	17.12 (16.33, 19.03)	17.36 (15.65, 20.28)	17.54 (15.24, 18.73)	0.745
Risser grade	3.0 (0.0, 4.0)	3.0 (0.0, 5.0)	2.0 (0.0, 4.0)	0.498
Main curve Cobb angle (°)	—	13.0 (12.2, 16.5)	16.6 (12.5, 19.0)	0.252

Values are medians (25th, 75th percentiles) or counts; sex is presented as male/female. Age, height, weight, BMI and Risser grade were compared using tie-corrected Kruskal–Wallis H tests with 2 degrees of freedom. Sex was compared using the Fisher–Freeman–Halton exact test. Main curve Cobb angles were compared only between the thoracic and TL/L groups using a two-sided Mann–Whitney U test. Rank tests report asymptotic P values; the sex comparison reports an exact P value. An em dash indicates not applicable. AIS, adolescent idiopathic scoliosis; BMI, body mass index; TL/L, thoracolumbar/lumbar.