

Oral presentation

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Values of thoracic kyphosis and lumbar lordosis in adolescents from Czestochowa

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Background

Knowledge of the normal value of sagittal curves of spine is essential during the assessment of the posture of the body.

Aim of the study

The goal of the study is to outline normal values of thoracic kyphosis and lumbar lordosis in adolescents.

Patient population

One thousand one hundred and fifty six adolescents (622 M and 534 F) aged 11–14 years from Czestochowa.

Methods

The measurement of curves in the sagittal plane were performed during clinical analysis of the body posture using plurimeter-V by Rippstein.

Results

See Table 1.

Conclusion

The applied method of the measurement is simple and useful in clinical practice.

References

1. Rigo M, Quera-Salvá G, Villagrasa M: **Sagittal configuration of the spine in girls with idiopathic scoliosis: progressing rather than initiating factor.** *Stud Health Technol Inform* 2006, **123**:90-4.

Table 1:

Values in ° K-kyphosis L-lordosis		9 y.		10 y.		11 y.		12 y.		13 y.		14 y.		15 y.		16 y.	
		boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
mean	K	34.5	32.9	31.0	31.5	32.7	30.0	32.8	31.2	33.1	32.8	33.5	32.5	35.1	32.8	37.5	29.7
	L	34.5	36.4	32.7	34.6	33.2	34.3	33.7	34.7	32.2	33.9	30.4	35.4	32.1	36.0	33.1	36.4
SD	K	7.33	6.37	7.01	8.05	8.05	7.30	7.76	7.32	8.28	8.12	8.23	6.94	7.46	7.29	7.48	6.97
	L	5.59	6.79	7.52	7.54	7.08	7.48	7.44	7.15	7.36	6.99	7.53	7.76	6.63	8.85	8.0	7.56
median	K	35	34	30	32	32	30	32	30	32	32	33	34	36	33	38	29
	L	33	36	32	34	32	34	32	34	32	34	30	34	32	38	34	36
minimum	K	20	22	16	10	16	12	16	11	18	16	18	18	20	16	26	18
	L	20	18	16	18	16	18	12	16	10	18	16	16	16	16	14	20
maximum	K	46	42	50	50	56	8	56	46	58	56	52	44	50	44	54	42
	L	44	44	50	58	54	50	56	52	50	54	54	52	46	54	46	48
10th Perc.	K	24	24	22	20	22	22	22	22	24	24	22	24	24	24	30	22
	L	30	30	24	26	24	24	24	26	24	26	22	28	24	22	24	26
90th Perc.	K	44	42	40	42	44	40	42	42	46	44	42	42	44	40	46	40
	L	42	44	42	44	42	44	44	44	42	42	40	48	40	44	42	46

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