

Oral presentation

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Values of thoracic kyphosis in adolescents from the city of Czestochowa (simple method of measurement during clinical examination) – pilot study

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Objective

Knowledge of the normal value of thoracic kyphosis is essential during the assessment of the posture of the body. We measured thoracic kyphosis in 566 adolescents from Czestochowa (city in Poland) aged nine to fourteen years (275 girls and 291 boys).

Study design

The measurement of thoracic kyphosis was performed during clinical analysis of body posture using plurimeter-V by Rippstein [1]. The measurement was made in stand-

ing position and spontaneous relaxed posture. Each value represents mean and standard deviation from at least three replicate measurements.

Results

See Table 1.

Conclusion

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

Table 1: Results.

Values of thoracic kyphosis in degrees	9 y.		10 y.		11 y.		12 y.		13 y.		14 y.	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Mean	27.3	24.9	25.6	26.4	29.1	28.4	27.5	26.2	20.8	31.7	36.4	30.7
SD	6.61	8.58	7.31	8.42	7.41	7.95	4.60	8.14	8.80	7.35	7.40	7.20
Median	26	24	26	27	30	30	28	24	30	34	36	30
Minimum	12	10	10	14	12	12	20	10	14	18	20	16
maximum	42	46	44	48	46	46	40	48	46	44	54	44
10th Perc.	18	16	16	16	18	18	22	18	20	22	28	22
90th Perc.	36	38	34	36	36	40	34	38	42	41	46	40

References

1. Green S, Buchbinder R, Forbes A, Bellamy N: **A standardized protocol for measurement of range of movement of the shoulder using the Plurimeter-V inclinometer and assessment of its intrarater and interrater reliability.** *Arthritis Care Res* 1998, **11**:43-52.

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