



POSNA

The Core Curriculum

Postural kyphosis

Objectives

1. Describe the development of normal sagittal alignment through childhood
2. Define the upper limits of normal thoracic kyphosis in the child and adolescent
3. Discuss treatment methods used for postural kyphosis

Discussion point

1. What do we really know about postural kyphosis?

Discussion

The knowledge base available for postural kyphosis is miniscule, which is truly remarkable considering the number of times this entity is described in texts and review articles on kyphosis in children. There are no clinical studies on postural kyphosis on Medline search from 1966-present, and no articles prior to that time are referenced in standard texts. The development of the normal sagittal is established in general terms. The newborn has an essentially straight spine. With normal development, cervical lordosis, thoracic kyphosis, and lumbar lordosis follow. Measurement of thoracic kyphosis radiographically is somewhat difficult due to the overlying scapulae superiorly. Generally, the upper limit of normal thoracic kyphosis is about 45 degrees, but a strict upper limit has not been established. Despite the frequent references to postural kyphosis, all recommendations for either the necessity of treatment or modalities for treatment are anecdotal.

References

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3. Probst-Proctor SL, Bleck EE. Radiographic determination of lordosis and kyphosis in normal and scoliotic children. *J Pediatr Orthop* 1983;3:334-36.
4. Stagnara P, De Mauroy JC. Reciprocal angulation of vertebral bodies in a sagittal plane: approach to references for the evaluation of kyphosis and lordosis. *Spine* 1982;7:335-42.