

Kyphosis

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Kyphosis or hunching over is normal in the thoracic spine. If you look at your child from the side, you will notice that there is a curve in the upper back where they are "hunched over" and a curve in the lower spine ("sway back"). Some kyphosis is normal. When the doctor measures it on an x-ray, the normal range for kyphosis is quite broad, between 20 to 50 degrees. However, when kyphosis is greater than 50 degrees, it becomes easy to see and is considered abnormal. Most parents will attribute this to "poor posture," but become concerned that despite their persistent reminders, their child will not stand up straight.

There are two common forms of kyphosis encountered in the teenage population: Scheueremann's kyphosis and postural roundback. Scheueremann's kyphosis is most common in teenage boys. It is characterized by a short, sharp kyphosis in the middle part of the upper spine, and may be associated with aching back pain. The kyphosis tends to be rigid on clinical examination. There are x-ray criteria that establish a diagnosis of Scheueremann's kyphosis that can be seen on the x-ray. A mild degree of scoliosis is common in adolescents with Scheueremann's kyphosis.

Postural round back is noted by a smooth, flexible kyphosis that is not typically associated with pain. The curve is easily corrected by asking the child to stand up straight. Radiographically, the criteria for the diagnosis of postural round back are kyphosis greater than 50 degrees, but without the other x-ray findings seen with Scheueremann's kyphosis. These curves tend to be mild in severity and extend over a longer number of vertebral segments when compared to Scheueremann's kyphosis.

Treatment decisions regarding kyphosis are based upon the expected natural history, the degree of deformity, the risk of progression during and after growth, and the severity of symptoms associated with the kyphosis.

Treatment options for kyphosis include observation, bracing or surgery. Kyphosis below 50 degrees requires no treatment. Kyphosis between 50 and 75 degrees, where there is significant growth remaining or persistent back pain, may be managed in a brace. Kyphosis bracing is technically difficult, and the brace must be custom made to properly fit the child. It requires a three-point bend to achieve correction of the curve while wearing the brace. Unlike scoliosis bracing, kyphosis bracing may produce sustainable correction of the curve if worn consistently during growth.

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