

Achondroplasia

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Most children with achondroplasia develop thoraco-lumbar kyphosis during their early years. This deformity is due to the association of axial hypotonia, macrocephaly, and a disproportionate thorax-to-abdomen ratio. Kyphosis may be progressive and, associated with canal stenosis, could lead to medullary compression. Along with hyperlordosis and hip flexion contractures, it may lead to severe functional impact and participate in reduced autonomy, or even an inability to ambulate.

Nevertheless, in a large portion of these cases, these anomalies spontaneously regress, with sometimes late improvements in axial tone. Bracing is the most frequently used strategy for the prevention and treatment of thoraco-lumbar kyphosis in children with achondroplasia. It is associated with a therapeutic education of the patient’s family along with suggestions for positional manipulations. We suggest a reevaluation of its use through questionnaires to the referring medical teams and a literature review.