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Topic	Bracing for Kyphosis
Title	Lumbar Scheuermann conservative treatment allows a proper vertebral body growth and spinal configuration: a case series.
Authors	Fusco C, Atanasio S, Zaina F, Negrini S.
Abstract	<p>Objectives: verifying the efficacy of brace treatment of lumbar Scheuermann disease on radiographic parameters.</p> <p>Background: Lumbar Scheuermann (LS) is an atypical localization of Scheuermann disease; it has been little studied and, above all, very few is known about its conservative treatment.</p> <p>Methods: We observed retrospectively 13 patients with diagnosis of LS, 7 of them needed bracing because of lumbar kyphosis, while the others were treated with physical exercises only to control pain and prevent deformity. All patients treated with brace (3 males and 4 females, average age 13.5 years) presented at first observation back pain, a lumbar kyphosis and a radiographic image of lumbar bone damage typical of Scheuermann disease. 5 of them started treatment with 23 or 20 hours/day of brace and reached the end of treatment after on average 2.5 years through a period of progressive brace weaning, while 2 are still in treatment.</p> <p>Results: The two treatment groups were significantly different at start. Both treatments allow a fast disappearance of pain; with bracing a progressive achievement of a proper sagittal outline is achieved, with a good radiographic reconstruction of lumbar vertebral bodies. Distances from plumblines improved, showing a gradual increase of lumbar lordosis. 2 patients are still in treatment, they are now pain free and clinical and radiographic data suggest an improvement of lumbar kyphosis.</p> <p>Conclusion: These observations show that brace can correct effectively LS allowing a proper lumbar vertebral body growth, while exercises can control pain and a possible worsening.</p>
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