

Oral presentation

Lumbar Scheuermann conservative treatment allows a proper vertebral body growth and spinal configuration: a case series

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Objectives

The objecting of this study was to verify the efficacy of brace treatment for lumbar Scheuermann disease on radiographic parameters.

Background

Lumbar Scheuermann (LS) is an atypical localization of Scheuermann disease. It has been seldom studied, and little is known about its conservative treatment.

Methods

We retrospectively observed 13 patients with the diagnosis of LS. 7 of them needed bracing because of lumbar kyphosis, while the others were treated only with physical exercises to control pain and prevent deformity. All patients treated with bracing (3 males and 4 females, average age 13.5 years) presented at first observation with back pain, lumbar kyphosis, and a radiographic image of lumbar bone damage typical of Scheuermann disease. 5 of them started treatment with 20 or 23 hours/day of bracing and reached the end of treatment after an average of 2.5 years through a period of progressive brace weaning, and 2 are still in treatment.

Results

The two treatment groups were significantly different at the start. Both treatments produce a fast disappearance of pain. With bracing, a progressive achievement of a proper sagittal outline was achieved, with a good radiographic reconstruction of lumbar vertebral bodies. Distances from

plumbline 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.

Conclusion

These observations show that bracing can effectively correct LS, allowing proper lumbar vertebral body growth, while exercises can control pain and possible worsening.