



Revista Española de Cirugía Ortopédica y Traumatología

www.elsevier.es/rot



ORIGINAL ARTICLE

Atypical lumbar Scheuermann's disease: A presentation of 6 cases[☆]

F.J. Lucas-García*, V. Vicent-Carsí, M. Sánchez-González

Servicio de Cirugía Ortopédica y Traumatología, Hospital Universitario La Fe, Valencia, Spain

Received 25 August 2012; accepted 1 November 2012

KEYWORDS

Scheuermann's disease;
Lumbar;
Atypical;
Limbus

Abstract Scheuermann's disease is the most common cause of kyphosis in adolescence, and one of the most common causes of back pain in this age group. It is most commonly located in thoracic spine and is generally painless. Scheuermann's disease in the lumbar spine is less known and may go undetected in daily clinical practice. Blumenthal described this entity as atypical lumbar Scheuermann's disease. This form presents with Schmorl's hernias in one or two vertebral bodies, with narrowing of disc space and changes in the vertebral plates. It is more often painful and it can be confused with traumatic, infectious or tumour diseases. In most patients, a radiographic study is enough to establish the diagnosis and to differentiate both forms. Our series consists of six patients affected with the atypical form of lumbar Scheuermann's disease and diagnosed by us. All patients had a repeated history of back pain with associated Schmorl's hernias, and a very high increase in lateral diameter in radiographic views of the lumbar spine. Involvement of a single vertebral body was the most prevalent (50% of cases), and the 4th lumbar vertebra was the most commonly affected. All patients returned to normal activities after conservative treatment with temporary immobilization and NSAIDs during pain episodes.

© 2012 SECOT. Published by Elsevier España, S.L. All rights reserved.

PALABRAS CLAVE

Enfermedad de Scheuermann;
Lumbar;
Atípica;
Limbus

Enfermedad de Scheuermann lumbar atípica: a propósito de 6 casos

Resumen La enfermedad de Scheuermann es el origen más común de cifosis de la columna dorsal en el adolescente. Es uno de los orígenes más comunes de la dorsalgia en este grupo de edad. Se trata de una enfermedad cuya localización más frecuente es la torácica, siendo generalmente indolora. La forma de enfermedad de Scheuermann en el raquis lumbar es menos conocida, pudiendo pasar desapercibida en la práctica clínica habitual. Esta entidad fue descrita por Blumenthal como enfermedad de Scheuermann lumbar atípica. La forma lumbar atípica consiste en la aparición de hernias de Schmorl en uno o 2 cuerpos vertebrales con estrechamiento del espacio interdiscal y cambios en los platillos vertebrales. Con mayor frecuencia es dolorosa, lo que puede ser confundida con afecciones traumáticas, infecciosas o tumorales. En la mayoría

[☆] Please cite this article as: Lucas-García FJ, et al. Enfermedad de Scheuermann lumbar atípica: a propósito de 6 casos. Rev Esp Cir Ortop Traumatol. 2013;57:135-9.

* Corresponding author.

E-mail address: packluc@hotmail.com (F.J. Lucas-García).

de los pacientes el estudio radiográfico es suficiente para establecer el diagnóstico y diferenciar ambas formas. Nuestra serie de 6 enfermos afectados de la forma atípica lumbar de la enfermedad de Scheuermann y diagnosticados por nosotros, presentaron una historia clínica de lumbalgias de repetición. Asociaban hernias de Schmorl y un aumento muy evidente del diámetro lateral en las proyecciones radiográficas de la columna lumbar. La afectación de un solo cuerpo vertebral fue la más predominante (50% de los casos) y la vértebra más comúnmente afectada fue la L4. Todos los pacientes se reincorporaron a sus actividades habituales tras ser tratados con medidas conservadoras de inmovilización temporal y antiinflamatorios durante los periodos de dolor.

© 2012 SECOT. Publicado por Elsevier España, S.L. Todos los derechos reservados.

Introduction

Scheuermann's disease is the most common source of thoracic kyphosis in adolescents and one of the most common sources of back pain in this age group. The criteria for clinical and radiological diagnosis are established by the appearance of 3 or more vertebrae adjacent to the apex of the curve with wedging of 5° or more and without evidence of congenital, infectious or traumatic alterations.¹⁻⁵ This type of thoracic kyphosis is greater than 45° Cobb and rigid. Its radiological characteristics include the existence of Schmorl nodes or hernias and irregularities in the endplates of the affected vertebrae. The most common location is thoracic, being generally painless unless there are severe deformities in the form of kyphosis.^{2,5,6}

The manifestations of Scheuermann's disease in the lumbar spine are less well known. Blumenthal et al.⁷ described 2 forms of involvement depending on the radiographic manifestations: the classical form (CSD), similar to dorsal involvement as described above, and the so-called atypical lumbar form (ALSD). The atypical form consists in the appearance of Schmorl hernias in 1 or 2 vertebral bodies, with a narrowing of the intradiscal space and changes in the vertebral endplates. In this series, the classical form was usually asymptomatic, unlike the atypical form which was most often painful. In most patients, the radiographic study is sufficient to establish the diagnosis and differentiate both forms.⁸

We present a series of 6 patients affected with ALSD in order to report their symptoms and history since, if unknown, and due to the association with pain, they can often be confused with traumatic or infectious aetiologies and go undetected in everyday clinical practice.

Materials and methods

We present the clinical features of patients diagnosed with this atypical form of involvement. Our series consisted of 6 patients, 4 males aged 30, 38, 39 and 42 years and 2 females aged 16 and 27 years. The professions of the males were of moderate physical intensity, including stock replenisher in a large supermarket, woodworker, policeman and baker, respectively, according to the previously specified ages. The professions of the females were student and fishmonger.

All patients presented lower back pain on numerous occasions prior to the establishment of the diagnosis. The mean

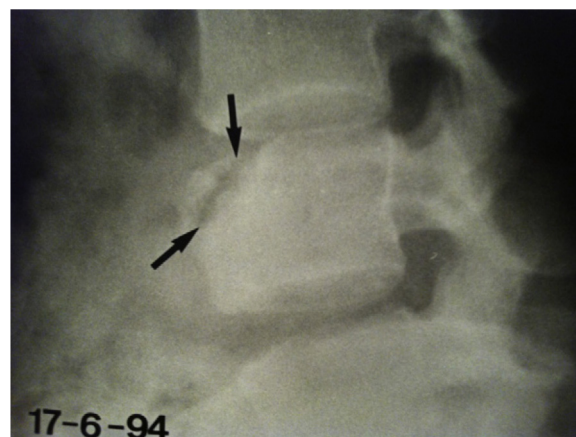


Figure 1 Lumbar radiograph at the L3 level showing an image of vertebral "pseudoarthrosis" or "nonunion" in a patient with a previous history of trauma.

time of onset of discomfort prior to diagnosis was 5 years. The mean follow-up time in the study was 6 years.

There was only 1 clear history of trauma, in the youngest female patient, relating to a bicycle crash 2 years earlier. In fact, this patient was sent to hospital with a diagnosis of pseudoarthrosis or nonunion of the L4 vertebral body (Fig. 1).

Results

There was a predominance of involvement of a single vertebral body, which in our series appeared in 50% of cases. In the remaining 3 cases, involvement was much more evident in 1 vertebral body, but there were Schmorl nodules in other vertebral bodies. None of the patients presented involvement of more than 2 lumbar vertebral bodies which, in addition, were always consecutive.

The radiographic study revealed Schmorl hernias in the patient with a previous history of trauma (Fig. 2). An increase of the lateral diameter was very evident in the vertebral radiographic projection (Knutsson vertebra, Fig. 3) in the other female patient who presented no detachment or solution of continuity in the upper vertebral vertex at the L5 level. Regarding the males, 1 of them suffered involvement of L5, 2 of them of L4 (Fig. 4), and the rest of L3 (Fig. 5). They also presented an increased lateral diameter compared to the remaining vertebrae, but this was much

Download English Version:

<https://daneshyari.com/en/article/4087385>

Download Persian Version:

<https://daneshyari.com/article/4087385>

[Daneshyari.com](https://daneshyari.com)