

ORIGINAL ARTICLE

## Lumbar synovial cysts: Presentation of a series of 10 cases and literature review<sup>☆</sup>



O. Lista-Martínez<sup>a,\*</sup>, V.M. Moreno-Barrueco<sup>b</sup>, J. Castro-Castro<sup>a</sup>, P. Varela-Rois<sup>a</sup>,  
A. Pastor-Zapata<sup>a</sup>

<sup>a</sup> Servicio de Neurocirugía, Complejo Hospitalario Universitario de Orense, Orense, Spain

<sup>b</sup> Servicio de Cirugía Ortopédica y Traumatología, Hospital HM Modelo, A Coruña, Spain

Received 12 May 2016; accepted 23 July 2016

### KEYWORDS

Synovial cyst;  
Lumbar spine;  
Instability;  
Surgical management

### Abstract

*Introduction:* Although they are frequently described in the literature, lumbar synovial cysts are a relative uncommon cause of low back and radicular leg pain.

*Objective:* To evaluate the treatment and surgical outcomes of the lumbar synovial cysts operated on in our hospital during a 5 year period.

*Material and methods:* A retrospective study was conducted on patients surgically treated in our department from August 2009 to September 2014, using a visual analogue scale for the clinical follow-up in the first year after surgery.

*Results:* After the surgical treatment (surgical removal of the synovial cyst with or without instrumented arthrodesis with transpedicular screws) of 10 patients (5 female and 5 male) with a mean age of 70.2 years (range 50–80), the clinical outcome was satisfactory in 80% of the patients, with the resolving of their symptoms.

*Conclusions:* Lumbar synovial cysts have to be considered in the differential diagnosis in patients with low back and radicular leg pain. The majority of the patients are in their sixties and have lumbar degenerative spondylopathy. Nowadays, surgical resection of the lumbar synovial cysts and spinal fusion are the recommended treatment, because it is thought that the increased movement of the spine is one to the causes of the cyst formation. More studies are still needed, hence the relevance of this article.

© 2016 SECOT. Published by Elsevier España, S.L.U. All rights reserved.

<sup>☆</sup> Please cite this article as: Lista-Martínez O, Moreno-Barrueco VM, Castro-Castro J, Varela-Rois P, Pastor-Zapata A. Quistes sinoviales lumbares: presentación de una serie de 10 casos y revisión de la literatura. Rev Esp Cir Ortop Traumatol. 2017;61:28–34.

\* Corresponding author.

E-mail address: [olallalista@hotmail.com](mailto:olallalista@hotmail.com) (O. Lista-Martínez).

**PALABRAS CLAVE**

Quiste sinovial;  
Columna lumbar;  
Inestabilidad;  
Manejo quirúrgico

**Quistes sinoviales lumbares: presentación de una serie de 10 casos y revisión de la literatura****Resumen**

*Introducción:* Los quistes sinoviales lumbares son una causa infrecuente de dolor lumbar y radicular, aunque cada vez se describen con más frecuencia en la literatura.

*Objetivo:* Analizar el tratamiento y resultados quirúrgicos de los quistes sinoviales lumbares intervenidos en nuestro centro en un período de 5 años.

*Material y métodos:* Se realizó un estudio retrospectivo de pacientes tratados quirúrgicamente en nuestro servicio entre agosto de 2009 y septiembre de 2014, empleando la escala visual analógica para seguimiento clínico durante el año posterior a la cirugía.

*Resultados:* Tras el tratamiento quirúrgico (exéresis del quiste con o sin artrodesis instrumentada con tornillos transpediculares), de 10 pacientes (5 mujeres y 5 varones) de edades comprendidas entre los 50 y 80 años (edad media 70,2 años), la evolución clínica fue satisfactoria en el 80% de ellos con resolución de su sintomatología.

*Conclusiones:* Los quistes sinoviales lumbares deben ser considerados en el diagnóstico diferencial de pacientes con dolor lumbar y radicular. La mayoría de estos pacientes están en la 6.<sup>a</sup> década de la vida y presentan generalmente una espondilopatía degenerativa lumbar. En la actualidad, se recomienda la exéresis de los quistes sinoviales con artrodesis instrumentadas con tornillos transpediculares, ya que se considera que el aumento de movilidad podría ser una de las causas de su aparición; aunque todavía se necesitan más estudios al respecto, de ahí el interés de este trabajo.

© 2016 SECOT. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

**Introduction**

Lumbar synovial cysts (LSC) appear in the zygapophyseal joint capsule of the lumbar spine. Von Gruker was the first to describe these lesions in 1880. In 1974 Kao *et al.*<sup>1</sup> were the first authors to report symptomatic nerve compression secondary to a lumbar synovial cyst and called these juxtafacet cysts. Their aetiology is unknown but it is believed that the extrusion of synovial fluid by the facet joint and the progressive growth of residual myxoid degeneration could be one of the causes. Increased mobility and repetitive micro traumas may possibly be influential to their formation.<sup>1,2</sup>

The majority of LSC patients are in their sixties and generally present with lumbar degenerative spondylosis. This is less frequent in younger patients where trauma is considered to principally be a possible trigger for formation.<sup>2</sup>

The prevalence of LSC is unknown and it is probable that no uniform distribution exists in all populations (0.65–10%). They are most frequently found in the lumbar region (85–95% of cases) and in females and usually mimic the symptoms of a lumbar herniated disc, leading to lower back pain and radicular pain.<sup>3</sup> Neurological deficit is extremely rare. In young adults and children they are rare but cases have been reported in the literature.<sup>2</sup>

**Material and methods**

A retrospective descriptive study was conducted on a series of 10 patients surgically treated in our LSC department, with a histologically confirmed diagnosis, between August 2009 and September 2014, both inclusive. This study was carried

out in compliance with the ethical regulations of the hospital research committee. The cysts were identified by lumbar sacral spine magnetic resonance imaging (MRI).

The patients underwent surgery following the initial failure of conservative treatment, consisting of a lack of response to analgesic and rehabilitation treatment. No infiltration techniques were used on these patients due to the possible risk of bleeding. All the patients gave their informed written consent and received the same pre-operative antibiotic prophylaxis in accordance with the Preventative Medicine Service protocol at the hospital. Surgical treatment comprised isolated excision of the synovial cyst with or without associated spinal instrumentation. Progressive follow-up after hospital discharge was for a minimum of a year with patients attending a consultation 3, 6, 9 and 12 months after surgery. A visual analogue scale (VAS) and control X-rays were used for all clinical follow-up.

Following identification of the cases, analysis was made of the epidemiology, clinical characteristics, imaging findings, therapeutic approach, patient evolution and any complications.

**Results**

10 patients surgically treated for LSC at our hospital during the period mentioned above were identified. There were 5 women and 5 men with ages ranging between 50 and 80 (mean age 70.2 years).

Clinical presentation consisted of: radicular pain in 4 patients (40%), claudication in 2 (20%), Lower back pain and

Download English Version:

<https://daneshyari.com/en/article/8803326>

Download Persian Version:

<https://daneshyari.com/article/8803326>

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