



Contents lists available at ScienceDirect

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

Epidural lipomatosis with cauda equina syndrome in chronic alcoholic patient: A case report

Sung-Soo Kim^a, Dong-Ju Lim^{b,*}^a Department of Orthopaedic Surgery, Spine Center, Haeundae-paik Hospital, Inje University College of Medicine, Republic of Korea^b Department of Orthopaedic Surgery, Seoul Spine Institute, Sanggye-paik Hospital, Inje University College of Medicine, Republic of Korea

ARTICLE INFO

Article history:

Received 29 October 2016

Received in revised form 10 February 2017

Accepted 10 February 2017

Available online 20 February 2017

Keywords:

Epidural lipomatosis
Cauda equina syndrome
Chronic alcoholism

ABSTRACT

INTRODUCTION: Epidural lipomatosis of the lumbar spine is a rare condition, which is described as the accumulation of fat in the extradural territory.**PRESENTATION OF CASE:** We report the case of a 60-year-old, non-obese, and chronic alcoholic man who was transferred to our spine department with cauda equina syndrome (CES) for 4 months. On magnetic resonance imaging (MRI), spinal epidural lipomatosis (SEL) was confirmed in the multilevel lumbar lesion. A decompression surgery was performed and the patient recovered significantly.**DISCUSSION:** The patient was not obese, had no abnormal liver laboratory test results, and no history of steroid injection or administration. The clinical signs at onset suggested bilateral lower cauda equina dysfunction, indicating a more diffuse involvement, consistent with lumbosacral epidural lipomatosis.**CONCLUSION:** This case report is the first description of SEL in a non-obese, chronic alcoholic patient who was neither receiving steroids nor had any kind of endocrinopathy.© 2017 The Author(s). Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Epidural lipomatosis of the lumbar spine is a rare condition, described as the accumulation of fat in the extradural territory [1]. This is usually secondary to an uncommon complication of long-term iatrogenic corticosteroid administration, endocrinological disorder, or obesity [2,3]. If neurological deficits develop, it is usually in the thoracic spine more than in the lumbar spine [1,4]. Spinal epidural lipomatosis (SEL) with cauda equina syndrome (CES) is not a common clinical condition [5,6]. Madelung disease (benign symmetrical lipomatosis) is diffuse deposits of fat arranged symmetrically in upper extremities, around the neck and shoulders. Middle-aged men who have a history of decades of heavy alcohol consumption occurred more frequently. Mechanism of etiology is assumed to be a malfunction in fat metabolism due to damage to mitochondrial DNA [7]. Here, we present a severe case of spinal epidural lipomatosis with cauda equina syndrome in a chronic alcoholic patient.

This article has been written according to SCARE criteria as described by Agha et al. for the SCARE group. 'The SCARE Statement: Consensus-based surgical case report guidelines. International Journal of Surgery 2016' [8].

* Corresponding author at: Department of Orthopaedic Surgery, Seoul Spine Institute, Sanggye-paik Hospital, Inje University College of Medicine, Dongil-ro 1342, Nowon-gu, Seoul, 139-707, Republic of Korea.

E-mail addresses: scd25@paik.ac.kr, ggoli74@gmail.com (D.-J. Lim).

<http://dx.doi.org/10.1016/j.ijscr.2017.02.017>

2210-2612/© 2017 The Author(s). Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

2. Case report

A 60-year-old non-obese, alcohol dependent man was transferred to our spine department with 4 months of progressive lower extremity weakness, neurogenic claudication with bladder bowel dysfunction, and hypoesthesia in the perineal region. He had a history of over four bottles of alcoholic drinks per day for 3 decades. He did not receive steroid medications or injection for other chronic illnesses nor had any definite liver disease, and was evaluated using plain radiography, computed tomography (CT), and magnetic resonance imaging (MRI). During admission to our hospital, he was not obese (weight 68 kg, height 178 cm, body mass index (BMI) 21.5 kg/m²). The MRI results demonstrated a pathological overgrowth of fat tissue in the spinal canal with a marked impingement of the dural sac, which showed severe central canal stenosis with space occupying epidural fat in the lumbar lesion (Fig. 1). Both leg and ankle weakness (power 2–3/5), and decreased sensation below L2 dermatome level were observed. Sphincter tone was decreased and saddle anesthesia was observed. L2/3 and L3/4 decompression and fat removal with partial laminectomy (Fig. 2), and L4/5 and L5/S1 total laminectomy with posterolateral fusion with pedicle screw fixation were performed without delay. After surgery, the patient showed delirium tremens and underwent additional treatment with a psychiatrist. Histopathological examination showed the presence of normal fat cells, in the absence of venous engorgement, hypervascularization, or bleeding (Fig. 3). With gradual improvement in the symptoms and signs, the patient returned to daily ambulatory activities with cane and almost recovered



Fig. 1. T1 weighted and short T1 inversion recovery (STIR) sequence MRI imaging: white arrow points to the epidural lipomatosis.

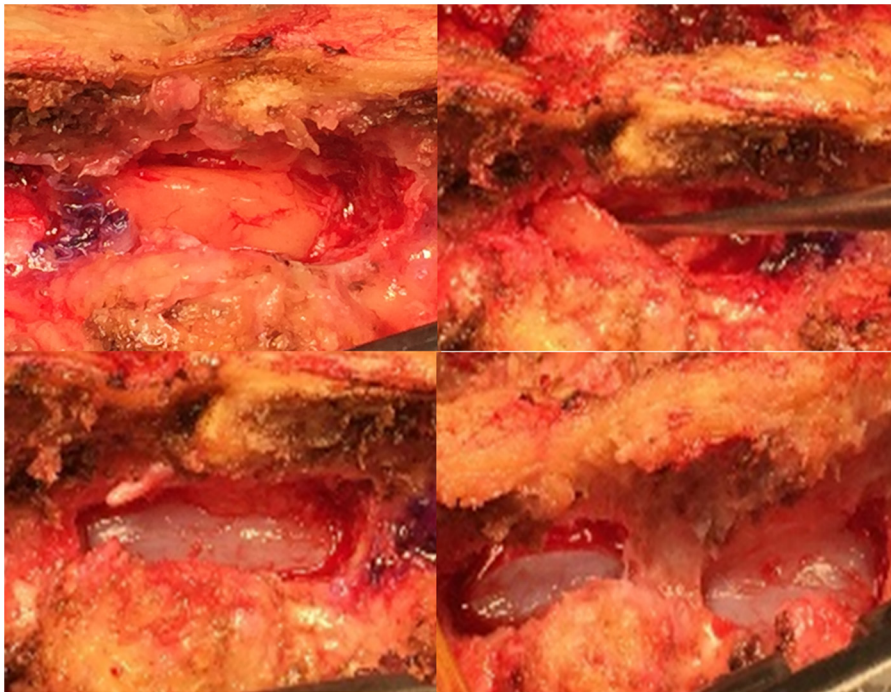


Fig. 2. Partial laminectomy and removal of hypertrophic fat tissue performed during surgery.

neurologically except for residual saddle anesthesia and voiding dysfunction at the 21-month follow-up.

3. Discussion

Epidural fat is soft and vulnerable; however, SEL is characterized by abnormal accumulation of unencapsulated fat in the epidural

space, which can cause a compressive CES [5,9]. In previous case reports, SEL was induced in most patients by steroids, obesity, or idiopathic causes [10,11].

SEL was first reported in 1974 with the use of steroids to prevent rejection reaction after a kidney transplant [12]. Thereafter, several reports have attributed the development of SEL to the administration of epidural steroid injections [13,14]. It has been reported that although the dose of steroid may be prescribed based on the time

Download English Version:

<https://daneshyari.com/en/article/5732853>

Download Persian Version:

<https://daneshyari.com/article/5732853>

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