

Unusual cause of lumbar canal stenosis in 8th decade of life – Spinal epidural lipomatosis

ABSTRACT

Spinal Epidural lipomatosis (SEL) is an uncommon condition, usually presents in young and middle aged patients, with male preponderance. Idiopathic SEL is rare, particularly in 8th decade of life. SEL should also be considered as a differential diagnosis in approach of elderly patient presenting with lumbar canal stenosis. Such a case of 77 year old man is presented here.

Keywords: Spinal lipomatosis, lumbar canal stenosis, elderly, geriatric claudication

A 77-year-old male, presented with the complaints of low backache, radicular pain in left L5 distribution, and neurogenic claudication of 2-year duration. The claudication distance reduced to 15 m over time. There were no bladder/bowel symptoms. He also had a history of diabetes and chronic obstructive pulmonary disease (COPD). He was taking glimepiride 1 mg twice daily for diabetes and ipratropium bromide 144 mcg with salbutamol sulfate 824 mcg in daily divided doses for COPD. He was a chronic smoker but stopped smoking 7 years back. His body mass index was 25.2 kg/m². Neurologic examination revealed motor weakness of (MRC Grade) 4/5 in the left knee extension, left ankle dorsiflexion, and left plantar flexion. Power in other lower limb was normal. Knee and ankle reflexes were diminished bilaterally. Plantar response was flexor bilaterally.

Magnetic resonance imaging revealed degenerative changes in the spine with disc bulges at L3–L4, L4–L5, with epidural lipomatosis from L3 to S1 [Figure 1a and b], causing severe compression and deformation of thecal sac into “Y,” stellate, trifold, and other bizarre shapes [Figure 1c-e]. He underwent L3–L5 laminectomy and excision of epidural lipomatosis. Circumferentially, lipomatosis was removed completely at L3–L5 and partially at S1 level and adequate decompression of thecal sac was achieved. Intraoperatively, the disc bulges were not significant on subjective assessment by

surgeon and discectomy was not done. Postoperatively, he had more than 50% subjective improvement in pain. His claudication improved significantly following surgery. At 6-month follow-up visit in the outpatient clinic, his claudication distance increased significantly to 500 m, and previous motor weakness improved to MRC 4+/5 at knee, and ankle joints.

Spinal epidural lipomatosis (SEL) is an uncommon condition, usually presents in young- and middle-aged patients, with male preponderance. (1) SEL is a rare, but recognized complication of exogenous corticosteroids, Cushing’s disease, and obesity. (2) Idiopathic SEL is rare, particularly in this age group with only one such case reported in literature. (3) Radiological evaluation is an important adjunct with high specificity and sensitivity to detect fat. Various shapes (Y, stellate) and epidural fat thickness of

MANOJ PHALAK, SUKANTA DAS, MANMOHAN SINGH, BHAWANI SHANKER SHARMA

Department of Neurosurgery, Neurosciences Center, All India Institute of Medical Sciences, New Delhi, India

Address for correspondence: Dr. Manmohan Singh, Room No 715, 7th Floor, Neurosurgery Office, Department of Neurosurgery, Neurosciences Centre, All India Institute of Medical Sciences, Ansari Nagar, New Delhi - 110 029, India. E-mail: manmohan1972@gmail.com

Access this article online

Website:
www.jcvjs.com

DOI:
10.4103/jcvjs.JCVJS_103_15

Quick Response Code



This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Phalak M, Das S, Singh M, Sharma BS. Unusual cause of lumbar canal stenosis in 8th decade of life – Spinal epidural lipomatosis. J Craniovert Jun Spine 2017;8:382-3.

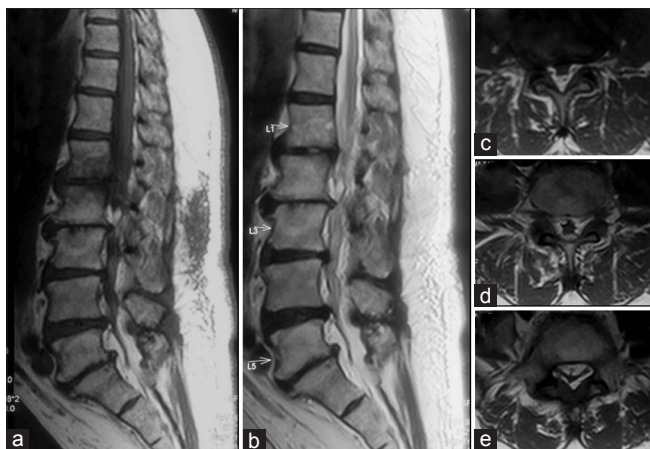


Figure 1: Magnetic resonance imaging lumbosacral spine (a) T1-weighted sagittal shows epidural hyperintense signal ventral and dorsal to the thecal sac from L3 to S1. (b) T2-weighted sagittal shows epidural hyperintense signal ventral and dorsal to the thecal sac from L3 to S1 with epidural compression and degenerated disc at L2–L3 and disc protrusion at L3–L4, L4–L5, and L5–S1 levels. (c) T1-weighted axial image at L3–L4 showing disc bulge and thecal sac compression dorsally by lipomatosis. (d) T1-weighted axial image showing stellate shape of the thecal sac compressed circumferentially by lipomatosis. (e) T1-weighted axial image showing Y shape of the thecal sac compressed circumferentially

more than 7 mm are considered diagnostic of SEL,^[1,2] which was observed in our case. Treatment options range from expectant/conservative-steroid tapering/stopping, weight control in mild cases to surgical excision in cases who present with severe neurological signs.^[4] Finally, lumbar canal stenosis in elderly can be degenerative, traumatic, or tumor in elderly,

SEL should also be considered as a one of the differential diagnosis in approach to such a patient.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Fassett DR, Schmidt MH. Spinal epidural lipomatosis: A review of its causes and recommendations for treatment. *Neurosurg Focus* 2004;16:E11.
2. Fogel GR, Cunningham PY 3rd, Esses SI. Spinal epidural lipomatosis: Case reports, literature review and meta-analysis. *Spine J* 2005;5:202-11.
3. Savas TE, Mehmet KA, Iplikcioglu AC. A case of epidural lipomatosis with lumbar canal stenosis. *J Neurological Sciences (Turkish)* 2012;29:417-21.
4. Al-Khawaja D, Seex K, Eslick GD. Spinal epidural lipomatosis – A brief review. *J Clin Neurosci* 2008;15:1323-6.