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Thoracic Myelopathy Due to Ossification of Ligamentum Flavum - Three cases Report -

Byoung Jik Kim, M.D., Jin Ho Cho, M.D. and Hyoung Keun Oh, M.D.

Department of Orthopedic Surgery, Inje University, Ilsan Paik Hospital, Koyangsi Kyounggido, Korea

- Abstract -

Ossification of the ligamentum flavum (OLF) is a definite clinical entity and is thought to be a form of ectopic ossification which develops predominantly in the lower thoracic spine.

OLF causes progressive compressive myelopathy, radiculopathy, or combination of both.

We experienced 3 cases of OLF with neurological symptoms, which were treated by posterior decompressive laminectomy and removal of the ossified ligamentum flavum with or without fusion with symptomatic improvement.

Key Words : Thoracic myelopathy, Ossification of ligamentum flavum

본 연구는 1998년 1월부터 2001년 12월까지 Inje University, Ilsan Paik Hospital에서 Thoracic Myelopathy로 진단된 3명의 환자를 대상으로 한 후향적 분석이다. 환자들은 모두 50대 이상의 남성으로, 평균 연령은 57.8세였다. 증상은 주로 하지의 감각 이상과 근력 약화였으며, 2명은 보행 장애를 호소하였다. MRI 검사상 T2 신호강도 증가를 보이는 OLF는 모두 T10-T11 수준에서 발견되었다. 3명의 환자 모두 후방 분절적 laminectomy를 시행하였으며, 2명은 OLF를 완전히 제거하였고, 1명은 부분적으로 제거하였다. 수술 후 모든 환자는 증상과 징후가 호전되었으며, 3개월 후 추적 검사에서 25%의 환자에서 OLF가 재발하였다.

Address reprint requests to

Cho Jin Ho, M.D.

Department of Orthopaedic Surgery, College of Medicine, Ilsan Paik Hospital, Inje University

#2240 Daehwa-dong, Ilsan-gu, Koyangsi, Kyounggido, Korea

Tel : 82-31-910-7330, Fax : 82-31-910-7967, E-mail : OSD07@ilsanpaik.ac.kr

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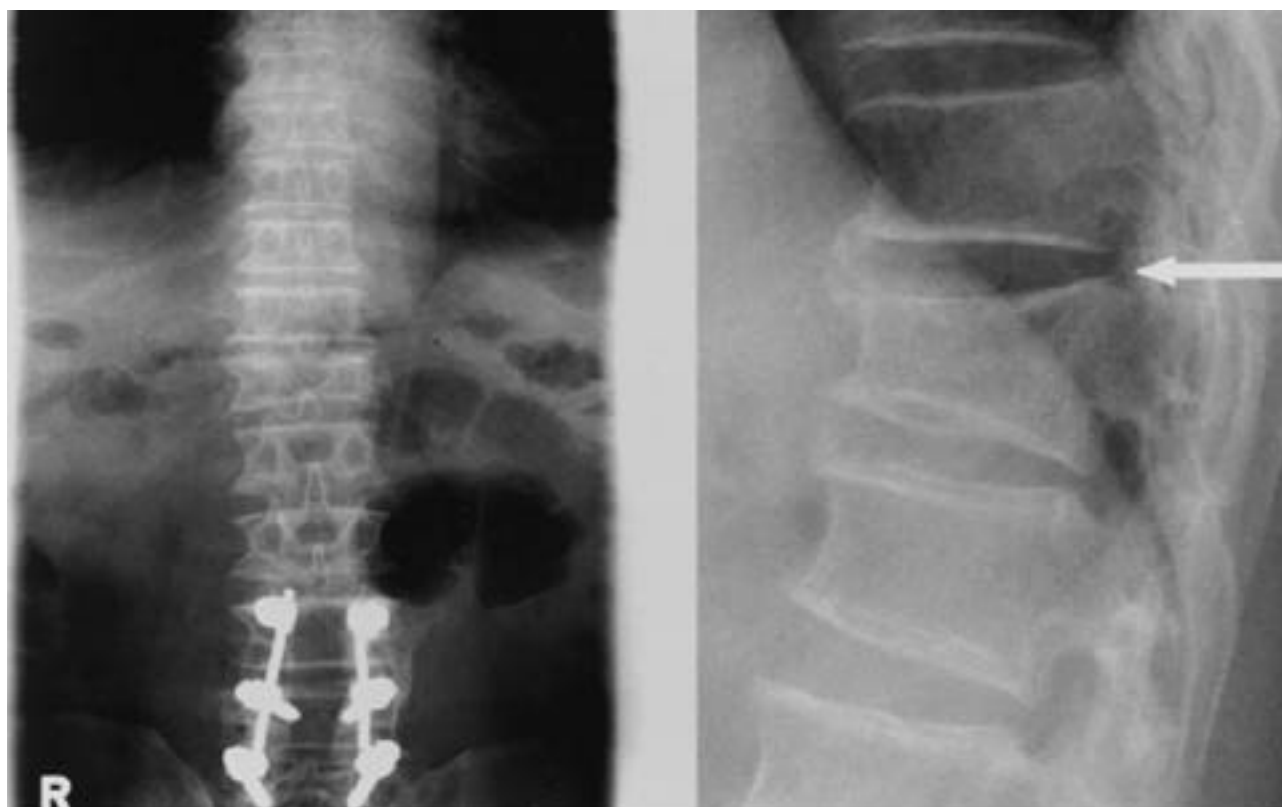


Fig 1. Preoperative anteroposterior & lateral radiographs shows a compression fracture of the body of T12 and triangular shaped mass are protruded into the spinal canal at T10-11, T11-12 level (case 1).



Fig 2. On CT scan, the spinal canal is compressed by ossified mass and intervertebral disc at T11-12 level.

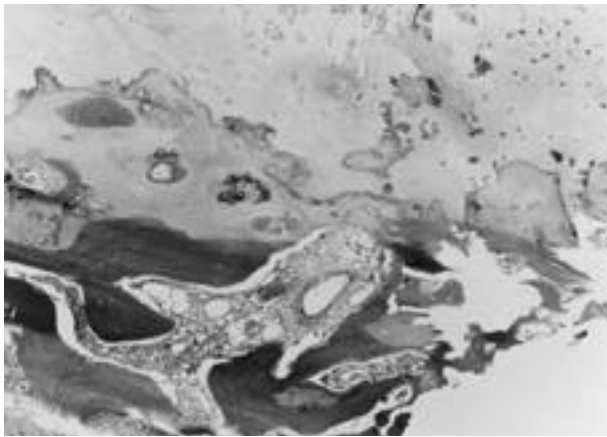


Fig 4. Microscopically, section of the mass shows an area of ossification in the ligamentum flavum (H&E × 400).

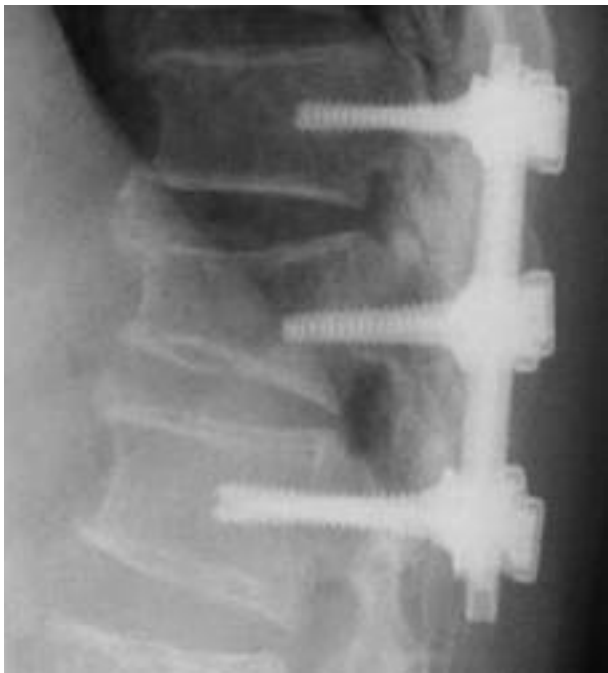


Fig 3. The postoperative plain lateral radiograph shows that ossified mass was removed.

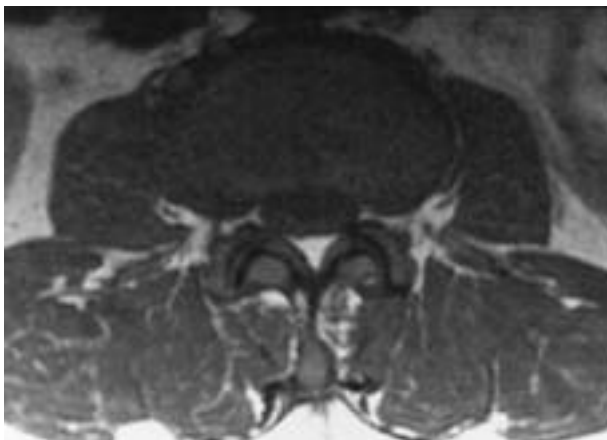


Fig 5. The preoperative MRI show that spinal canal is compressed by ossified nodular mass at T11-12 level (case 2).

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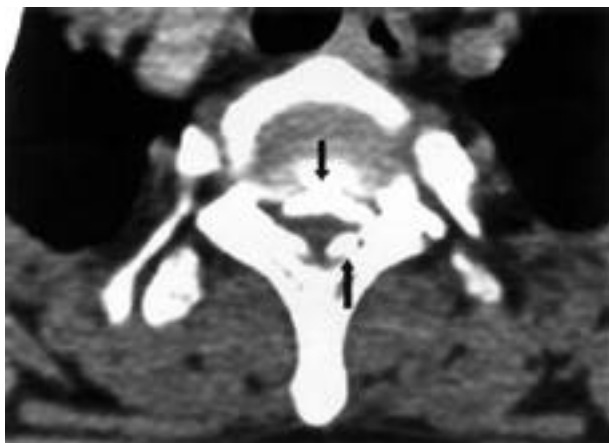


Fig 6. The preoperative CT scan reveal ossification of posterior longitudinal ligament and ligamentum flavum at T1-2 level (case 3).

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 6.2%, 4.8%
 , Casino Blando¹⁾
 65 20%
 (central or interlaminar) (lateral or capsular)
 가
 3)
 가 , Otani ⁸⁾
 58.6%
 Miyamoto ⁵⁾ (bone
 morphogenic protein)
 1/3 Miyasaka ⁶⁾

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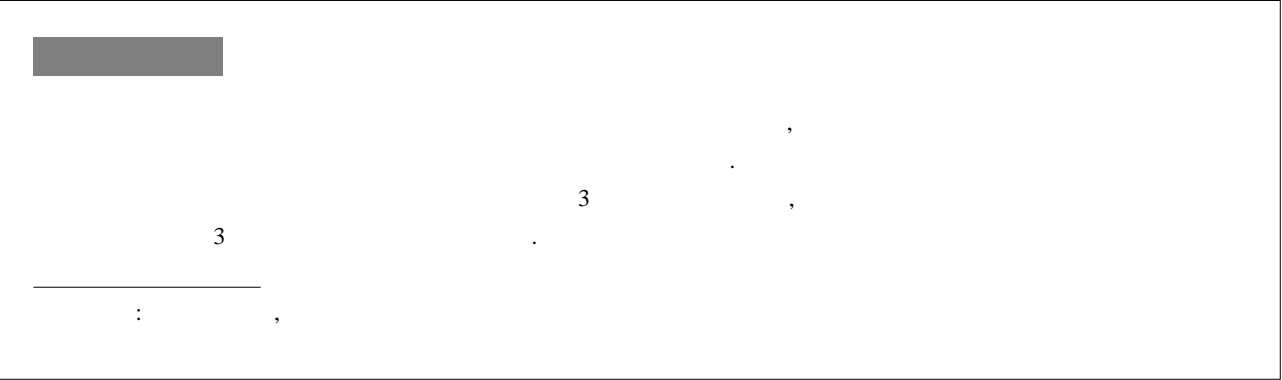
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Tel : 82-31-910-7330, Fax : 82-31-910-7967, E-mail : OSD07@ilsanpaik.ac.kr