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Pyogenic L4-5 Spondylitis Managed with Percutaneous Drainage Followed by Posterior Lumbar Interbody Fusion – A Case Report –

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– Abstract –

Study Design : A case report and review of literature

Objective : Mostly operative treatment for pyogenic spondylitis has been performed via anterior approach, which is often followed by greater morbidity and late sequelae. Efficacy of percutaneous drainage and posterior lumbar interbody fusion (PLIF), which are increasingly applied with favorable results, as an alternative of anterior surgery was investigated.

Material and Method : A case of pyogenic L4-5 spondylitis with psoas abscess but without neurologic deficit in a 66-year old lady was reviewed. Percutaneous drainage under fluoroscopic guide was performed. 7 weeks later, curettage of disc space and posterior lumbar interbody fusion using autogenous graft was performed to get rid of dead space and achieve stability. Administration of antimicrobial agents followed.

Results : Infection was controlled successfully. Clinical features including ambulatory function improved. Solid fusion was achieved.

Summary : In treating pyogenic spondylitis with moderate abscess, percutaneous drainage and posterior lumbar interbody fusion seemed to be one of alternatives of anterior surgery.

Key Words : Lumbar, Pyogenic spondylitis. Percutaneous drainage, Posterior lumbar interbody fusion (PLIF)

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Fig. 1-A. Initial lateral radiographs shows mild narrowing of L4-5 disc space and subchondral sclerosis adjacent to the end plates.
B. Initial T2-weighted coronal image reveals high signal intensity in L4-5 disc space and moderate bilateral psoas abscess without significant bone destruction.

(Fig. 1B).

(Cefazoline, GM) 가

가 (MRSA) 가 Methicillin

Vancomycin

66 가 3

39 spiking ,

15,950/mm³, 85% .

C (CRP) 34.0 mg/dl, .

(ESR) 88 mm/hr 가 .

가 , 가 .

4-5 (MSSA)

(Fig. 1A),

(MRI)

MRI 4-5 5 20 cc 1

3 cc ,

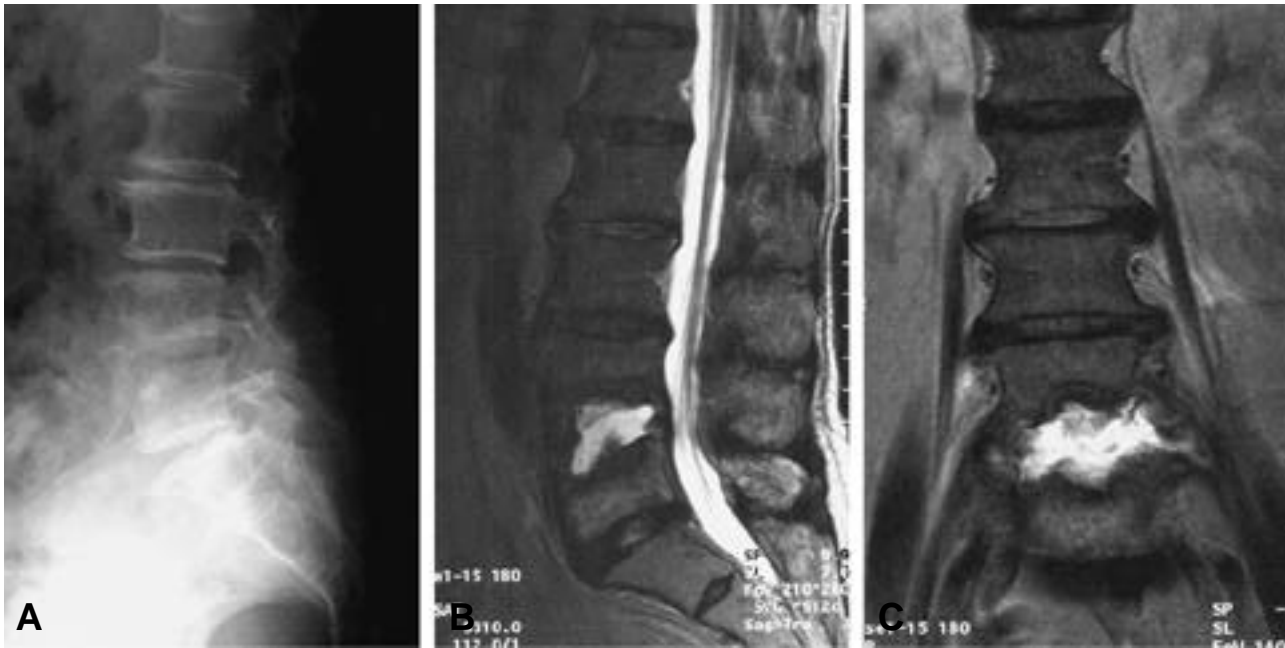


Fig. 2-A. Lateral X-ray at 7 weeks post-PCD shows progression of bony destruction.
B. Preoperative T2-weighted sagittal image reveals expanded intervertebral dead space filled with fluid, L4-5.
C. T2 coronal image shows widened dead space and irregular bony destruction.

13 , 160 cc . 4 curet
ESR CRP 73 mm/hr, 4.3 mg/dl
(Fig. 3).
(Rifampin, Fusidate)
가
3 (7) 가
37.0 , ESR 83 mm/hr, CRP 3.0 가 MRSA
mg/dl (Vancomycin)
3
4-5
5
(Fig. 2A). MRI 7 4-5 15 cc 가
(dead space) 3 (3)
(Fig. 2B, C). 가 . CRP가 0.3
, 4-5 mg/dl 6
(Rifampin, Fusidate)가 가
CRP 4
4-5
. 4, 5 18
4-5
(Fig. 4A, B).



Fig. 3-A. After thorough curettage of intervertebral dead space and copious irrigation, transpedicular screws were inserted.
B. Continuous suction drainage for 3 weeks followed.

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2)

4~6

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ESR CRP

가

9)

Yu 14)

(percutaneous nucleotome)

Jeanneret Magerl⁵⁾

Shands

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가

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Fig. 4-A. Complete solid fusion at postoperative 1 year.
B. Lateral X-ray shows good sagittal alignment.

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