

Surgical Treatment of Root Injury after Percutaneous Vertebroplasty -Case Report-

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- Abstract -

Percutaneous vertebroplasty using PMMA was first performed in France by Deramond in 1984. It was later used to treat vertebral compression fractures caused by osteoporosis. With osteoporotic compression fractures, reported complications were few and minor. However, the principal risk of such a percutaneous technique is the leak of PMMA into the spinal canal or neural foramina. Despite being uncommon, major neurologic complications demand surgical interventions that prevent permanent neurologic dysfunction. We experienced a case of root compression during percutaneous vertebroplasty, which was treated by early surgical posterior decompression.

Key Words : Compression fracture, Percutaneous vertebroplasty, Root compression, Early surgical decompression

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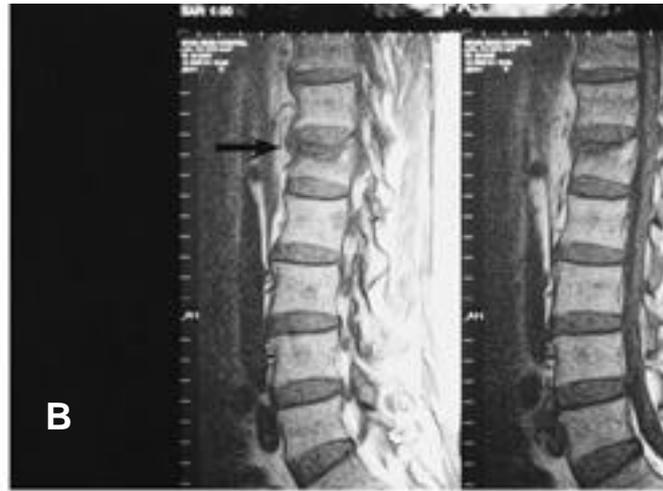


Fig. 1-A. Lateral radiography of lumbar spine. It shows compression fracture at the L1 level.
B. Sagittal T1-weighted image shows low signal in the marrow space of L1.

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 , Deramond ⁴⁾ 90%
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Fig. 2-A. Lateral radiography after vertebroplasty shows cement leakage into the spinal canal.
B. CT scan after vertebroplasty shows compressed spinal cord and both L1 nerve roots by cement.

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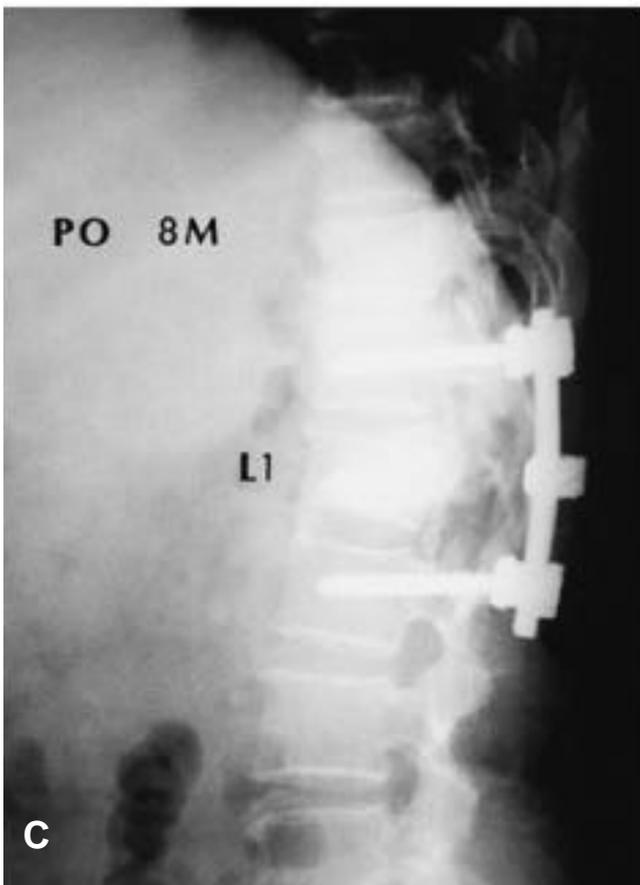


Fig. 3-A. CT scan after posterior decompression.
B. Immediate postoperative radiography.
C. 8 months follow-up radiography shows acceptable alignment.

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