



Traumatic burst fracture and dislocation of the lumbar spine with an intact neurologic function

A 51-year-old man presented with low back pain and limitation of movement of lumbar spine after a fall accident. The patient had no neurologic deficit. Plain radiograph and computed tomography demonstrated burst fracture and dislocation of the L4 vertebral body (Fig. 1). Magnetic resonance imaging showed disruption of the posterior ligamentous complex (Fig. 1).

The posterior depression, reduction, and fixation surgery were undertaken. The autogenous iliac bone grafting through the posterior edge break of the L4 vertebral body was performed with the help of a modified bone graft funnel (Fig. 2).

A satisfactory reduction of the dislocation was obtained and, a computed tomography scan confirmed the cleft of the L4 vertebral body filled with autogenous iliac bone (Fig. 3).



Fig. 2. The operative radiograph shows autogenous iliac bone grafting with the help of a modified bone graft funnel.

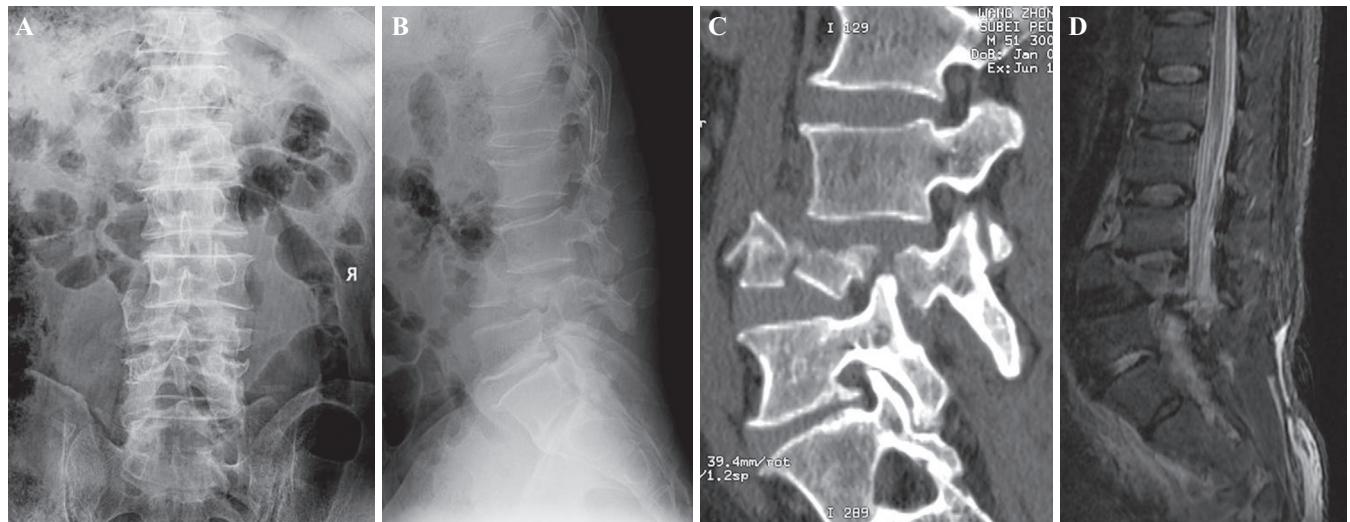


Fig. 1. The preoperative images demonstrate burst fracture and dislocation of the L4 vertebral body: anteroposterior (A) and lateral (B) radiographs, sagittal computed tomographic reconstruction (C), and magnetic resonance imaging (D).

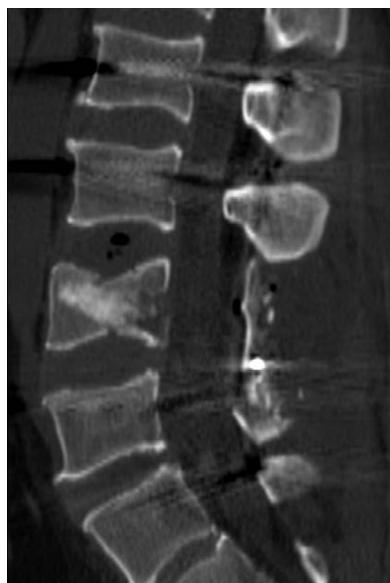


Fig. 3. The postoperative CT scan shows satisfactory reduction of dislocation and the cleft of the L4 vertebral body filled with autogenous iliac bone.

Liang Zhang, PhD
Jingcheng Wang, PhD
Xinmin Feng, MD
Yuping Tao, MD

*Department of Orthopedics
Clinical Medical College of Yangzhou University
Subei People's Hospital of Jiangsu Province
No. 98 Nantong West Rd
Yangzhou 225001, China*

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