



HISTORY & PHYSICAL

MW is a 34 year-old female homemaker with an eighteen-month history of mechanical low back pain occasionally radiating into the legs. Pain could not be attributed to any precipitating event, nor was there any pending litigation. The patient described classic mechanical low back pain, worse with bending, twisting, turning, climbing or stooping. This interfered with routine activities of daily living and her quality of life. Epidural injections, pharmacotherapy, physical, chiropractic, and message therapy offered no benefit.

Upon physical examination MW was well developed, well nourished and in very good physical condition and her neurological exam was normal. Positive findings on exam included significant pain with flexion, extension, and standing from the sitting position. While sitting, she constantly adjusted her position seeking comfort.

Her pre-operative MRI (**Figure 1**) shows collapse of the L5-S1 disc space with modic and degenerative changes as well as herniation of the disc through the inferior end plate of L5.

PROCEDURE

Surgery in the form of a posterior lumbar interbody fusion with L-Pod cages (Theken Surgical, Akron, Ohio), local bone and pedicle screws and rods was performed. The procedure was done through a single posterior midline incision. Laminotomies and facetectomies out to the pedicle were first performed bilaterally. This bone was preserved and mixed with iliac crest marrow to fill the L-Pod cages and the disc space. Discectomy was then performed and the endplates were prepared for fusion using curettes and the appropriate size shavers from the Theken PLIG kit. Spreaders from the PLIG kit were used to distract the disc space. The cages are a rectangular shape in the coronal plane as introduced into the intervertebral space, the height being 2mm greater than the width (**Figure 2**). They are also crowned on their superior and inferior aspect along their longitudinal axis to conform with the natural concavity of the disc space. The 5 degree tapered cages (9x11x25mm) were introduced into the disc space horizontally then rotated 90 degrees. This serves to return the disc space to its approximate normal anatomical height, and the resulting compressive forces serve to stabilize the cage. The lower profile of these cages allows for a relatively atraumatic introduction into the disc space. In this case no nerve root retraction was necessary during this portion of the procedure. The cages are recessed about 5mm from the posterior face of the vertebral body. Pedicle screws and rods were then placed.

Operative time was 105 minutes with blood loss of 150 cc's. Hospital stay was four days, typical for this type procedure.

FOLLOW-UP

At the three-month visit she reported excellent relief of pain with occasional Lortab use. She went on a family vacation with her three young children (Ages 5, 8, 10) and suffered a minor setback. At 9 months she resumed all normal activities including gardening and was off all medications. Her X-rays and CT scan (**Figures 3 & 4**) show excellent positioning of the cages and pedicle screws with a maturing fusion. She remains extremely pleased with the results of the operation.

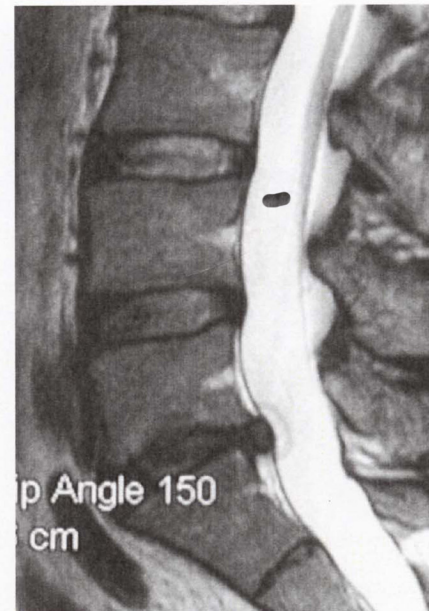


Figure 1



Figure 2



Figure 3

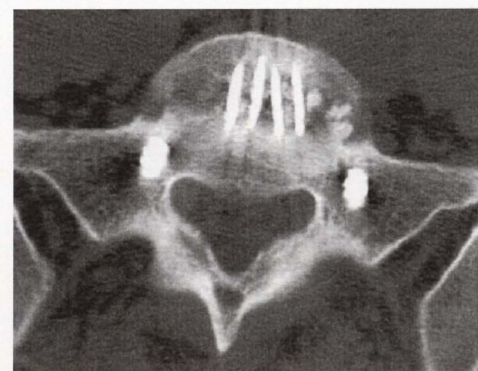


Figure 4