Overview
This procedure is performed to relieve the pain caused when diseased or damaged vertebrae bone blocks and pinches nerve roots. It also corrects spinal column deformities. During this procedure, the patient is positioned on his right side. The surgery is performed through the patient's left side.

Incision Made
After an incision is made, care is taken to remove the diseased and damaged parts of the vertebral bone. This relieves pressure from the nerve roots.

Diseased Fragments Removed
The discs above and below the affected vertebra are removed along with any diseased vertebral fragments. The bone surfaces are cleared and prepared to receive a bone graft.

Bolts Inserted
Bolts are screwed into the vertebrae above and below the gap to help the surgeon perform the rest of the procedure.

Curvature Corrected
The surgeon opens the vertebral space and corrects the spinal column curvature. This is known as reduction of deformity.

Bone Graft Inserted
While the vertebral space is open, the bone graft is inserted. Closing the vertebral space secures the bone graft tightly into place.

Zplate Inserted
A piece of metal called a Zplate is placed onto the two bolts, bridging the vertebrae levels above and below the bone graft.

Additional Screws Inserted
Two nuts hold the Zplate in place, and two additional screws are inserted.

End of Procedure
The Zplate keeps the area secure while the bone heals. During the healing process, the bone graft will knit with the vertebrae levels above and below to create one solid bone segment, known as a bone fusion.