Lumbar – Anterior Lumbar Interbody Fusion (ALIF)

An anterior lumbar interbody fusion (ALIF) is performed to remove a large portion of a degenerated disc that is frequently the source of back or leg pain. This procedure makes space between the vertebral bodies, relieving pressure and creating more room for spinal nerves to exit. It is called an anterior procedure because the spine is approached from the front. Unlike posterior approaches (from the back), the anterior approach avoids damage to the low back muscles. The removed disc portion is replaced with implanted bone grafting materials and adjacent vertebral bodies fuse to provide support.
Introduction
An anterior lumbar interbody fusion (ALIF) is performed to remove a large portion of a degenerated disc that is frequently the source of back or leg pain. This procedure makes space between the vertebral bodies, relieving pressure and creating more room for spinal nerves to exit. It is called an anterior procedure because the spine is approached from the front. Unlike posterior approaches (from the back), the anterior approach avoids damage to the low back muscles. The removed disc portion is replaced with implanted bone grafting materials and adjacent vertebral bodies fuse to provide support.

Incision and Disc Removal
An incision is made on the lower abdomen, usually just left to the middle of the body. Through this incision, exposure is provided to the front of the lumbar spine. Surgical instruments are used to remove some or all of the degenerated disc. If part of the disc material is spared, it is often retained to enclose bone graft implants.

Fusion
The disc space between the vertebrae is prepared to accept a cage that will take place of the disc. Next, bone graft material is placed in the cage. The cages is then inserted between the vertebral bodies to provide stability while new bone grows in place, fusing the vertebrae.
Summary
The incision is closed and dressed to complete the surgery. Patients will typically be hospitalized for 2-4 days and should avoid strenuous activity for 6-12 weeks.